Usenet Newsgroup Archive: rec.radio.amateur.homebrew

2009

These Usenet messages were preserved as a plain-text archive. This PDF was generated by Digital Library of Amateur Radio & Communications from the source text file in 2026.

Date span: 2009-01-01 through 2009-12-31

Source text: rec.radio.amateur.homebrew.txt

Source item: https://archive.org/details/usenet-rec

Messages included in this PDF: 1,267

Message records with no readable body available in the source text: 1

Messages are presented chronologically by archived date.

Binary or encoded payloads are not printed as blocks of encoded text; a placeholder appears where such material was detected. The original source text is unchanged.

1. Re: 01 tube as RF amp..

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-01 02:14:49 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <f2cb0684-92e2-43f9-950e-fc1cdef0bdec@e1g2000pra.googlegroups.com>
Source record: 3362

On Dec 30, 2:54 pm, ken scharf <wa2mzeNOSPAMB...@bellsouth.net> wrote:
> Tio Pedro wrote:
> > "ken scharf" <wa2mzeNOSPAMB...@bellsouth.net> wrote in message
> >news:Eqt6l.429$Y32.30@bignews8.bellsouth.net...
> >> > Even with it's 'hard vacuum' the 01 didn't have as good a 'getter' as
> >> later tubes and would arc over with more than 130 volts or so. It was
> >> used as a transmitter before the type 202 tube became widely available,
> >> but was a QRP thing, less than a watt input.
>
> > Will it have enough output to drive a 245?
>
> I'm sure it will drive a neutralized 245 to provide some gain.
> You might not get enough drive for full power output from the 245.
> (even if the 245 was run in class A, which requires NO driving power
> you would still see SOME power gain).

Hmmmm...You think class A at RF requires no driving power??

Cheers,
Tom

2. Re: 01 tube as RF amp..

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-01 03:16:06 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <ruW6l.1076$gE4.1056@bignews5.bellsouth.net>
Source record: 3363

K7ITM wrote:
> On Dec 30, 2:54 pm, ken scharf <wa2mzeNOSPAMB...@bellsouth.net> wrote:
>> Tio Pedro wrote:
>>> "ken scharf" <wa2mzeNOSPAMB...@bellsouth.net> wrote in message
>>> news:Eqt6l.429$Y32.30@bignews8.bellsouth.net...
>>>> > Even with it's 'hard vacuum' the 01 didn't have as good a 'getter' as
>>>> later tubes and would arc over with more than 130 volts or so. It was
>>>> used as a transmitter before the type 202 tube became widely available,
>>>> but was a QRP thing, less than a watt input.
>>> Will it have enough output to drive a 245?
>> I'm sure it will drive a neutralized 245 to provide some gain.
>> You might not get enough drive for full power output from the 245.
>> (even if the 245 was run in class A, which requires NO driving power
>> you would still see SOME power gain).
>
> Hmmmm...You think class A at RF requires no driving power??
>
> Cheers,
> Tom
Only voltage, no current.
Of course some power gets wasted since resistance isn't zero and some
heat is generated in the coils, etc. I guess there is some power factor
in the grid / cathode capacitance etc. The input impedance of the '45
in class A SHOULD BE infinite. It isn't, but it IS VERY HIGH. So
except for losses, no driving power, only voltage.

3. Re: 01 tube as RF amp..

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-01 03:18:31 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <HwW6l.1077$gE4.631@bignews5.bellsouth.net>
Source record: 3364

Tio Pedro wrote:
> "ken scharf" <wa2mzeNOSPAMBOTS@bellsouth.net> wrote in message > If you
> want to use tubes from the same era, then I'd pick a '27 for the
>> oscillator. The 27 is probably the first tube in a chain of evolution
>> that led up to the 1626 which was used for the same purpose in the ARC-5
>> transmitters. (though the 1625 is a heck of a lot easier to drive than a
>> '45!).
>>
>
> I agree Ken. A lot of the early 30s rigs used a tetrode driving a 45.
> I'll have to dig deeper. (Looking for retirement projects!)
> I saw a neat design using a pair of 30s to drive a P-P pair of 33s in
> one battery TX QST ran in 32 or so.
>
> Pete
>
>
The 27 is an indirectly heated triode.
Except for the Kellog tube, it was the first one ever made.
(not talking prototypes though).

The 24A is a tetrode. Than might make a nice xtal oscillator to drive
the '45.

4. Re: Spectrum Analyser Using Tek 465

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-01 16:58:11 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <8675865b-5ba0-46cc-b7c6-1037f2af107e@l33g2000pri.googlegroups.com>
Source record: 3365

On Dec 30 2008, 8:08 am, M0WYM <Sanss...@peartreegreen.org> wrote:
> I wonder if anyone knows of a project or kit that uses a 'scope
> timebase output as the basis of an HF spectrum analyser. My aim is
> to make something that would be useful for filter work so I'm not
> necessarily looking for very wide frequency sweep.
>
> TIA,
>
> Charlie.
>
> --
> M0WYMwww.radiowymsey.org
>
> Sign today!http://petitions.pm.gov.uk/SaveShortwave/

Hey OM
In the old analog TV days I used a cable ready varactor tuner as a
sweep generator to drive the scope and MAKE it a spectrum analyzer.
All you needed was a ramp voltage to sweep the varactor tuning with.
Nowadays I could use a transceiver hooked up to a computer and use
digipan or ham radio deluxe to do that.

73 OM
n8zu

5. Re: 01 tube as RF amp..

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-01 18:29:50 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <a9cf3995-1ed3-438c-aab4-429a346ed98f@q30g2000prq.googlegroups.com>
Source record: 3366

On Dec 31 2008, 7:16 pm, ken scharf <wa2mzeNOSPAMB...@bellsouth.net>
wrote:
> K7ITM wrote:
> > On Dec 30, 2:54 pm, ken scharf <wa2mzeNOSPAMB...@bellsouth.net> wrote:
> >> Tio Pedro wrote:
> >>> "ken scharf" <wa2mzeNOSPAMB...@bellsouth.net> wrote in message
> >>>news:Eqt6l.429$Y32.30@bignews8.bellsouth.net...
> >>>> > Even with it's 'hard vacuum' the 01 didn't have as good a 'getter' as
> >>>> later tubes and would arc over with more than 130 volts or so. It was
> >>>> used as a transmitter before the type 202 tube became widely available,
> >>>> but was a QRP thing, less than a watt input.
> >>> Will it have enough output to drive a 245?
> >> I'm sure it will drive a neutralized 245 to provide some gain.
> >> You might not get enough drive for full power output from the 245.
> >> (even if the 245 was run in class A, which requires NO driving power
> >> you would still see SOME power gain).
>
> > Hmmmm...You think class A at RF requires no driving power??
>
> > Cheers,
> > Tom
>
> Only voltage, no current.
> Of course some power gets wasted since resistance isn't zero and some
> heat is generated in the coils, etc. I guess there is some power factor
> in the grid / cathode capacitance etc. The input impedance of the '45
> in class A SHOULD BE infinite. It isn't, but it IS VERY HIGH. So
> except for losses, no driving power, only voltage.

OK, to get an _accurate_ answer with respect to grid driving power,
you need to account for the effects of the electrons going from
cathode to plate as they pass by the grid. At high enough frequency,
this becomes significant. This is quite apart from losses in elements
external to the tube. One reference about this is Terman's "Radio
Engineers' Handbook, section 4, paragraph 9. But just consider that
it takes a certain amount of _energy_ to push those electrons around
and control them, even if they don't actually ever come in contact
with the grid.

Cheers,
Tom

6. Re: Spectrum Analyser Using Tek 465

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-02 02:53:27 UTC
From: JIMMIE <jimmie68@gmail.com>
Message-ID: <2319fda0-833a-4cd3-b63c-e3319929010d@z28g2000prd.googlegroups.com>
Source record: 3367

On Dec 30 2008, 9:41 am, "Tio Pedro" <radioconnect...@cox.net> wrote:
> "M0WYM" <Sanss...@peartreegreen.org> wrote in message
>
> news:gjd6fvhtk1@news.albasani.net...
>
> >I wonder if anyone knows of a project or kit that uses a 'scope timebase
> >output as the basis of an HF spectrum analyser. My aim is to make something
> >that would be useful for filter work so I'm not necessarily looking for
> >very wide frequency sweep.
> > > Charlie. M0WYM
>
> My own analyzer was a kit for a QST project sold by
> A&A Engineering; the design centered around a CATV
> module and had it's own timebase and IF strip/log detector
> internally. The analyzer used the scope as a X-Y display.
> For serious SSB and CW filter work the VCO is going to
> be tricky, you'll need low phase noise, etc.; and a good
> set of narrow IF filters that can be swept is another
> can of worms. Most of the ham analyzers are better
> suited for wider IF responses and wide sweep ranges.
> I did a major rework of the IF and Log Amp using an
> Analog Devices chip, but the analyzer still has
> limitations.
>
> I'd seriously look at some of the DSP receiver kits that
> are now on the market--most offer spectrum display
> on the computer screen, and adding a good, but
> simple, sweep generator might be an easier approach.
>
> Pete

I had a little one band kit radio that was varactor tuned in my hands
for a while and used the sweep voltage from a scope to to drive the
varactors. I was interesting but the scope didnt have enogh
persistence to show a good display. It really looked cool when you
used a marker generator with it in a dark room.

JImmie

7. Re: Spectrum Analyser Using Tek 465

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-02 10:16:19 UTC
From: M0WYM <Sansspam@peartreegreen.org>
Message-ID: <gjkphjpke1@news.albasani.net>
Source record: 3370

JIMMIE wrote:
<SNIP>
>
> I had a little one band kit radio that was varactor tuned in my hands
> for a while and used the sweep voltage from a scope to to drive the
> varactors. I was interesting but the scope didnt have enogh
> persistence to show a good display. It really looked cool when you
> used a marker generator with it in a dark room.
>
> JImmie

Jimmie,

That sounds like fun - I will have to try that with my BITX20A which
I modding to varactor tuning

Charlie.

--
M0WYM
www.radiowymsey.org

Sign today!
http://petitions.pm.gov.uk/SaveShortwave/

8. PA3AKE Project Update - DDS

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-02 16:46:25 UTC
From: "Gian, I7SWX" <i7swx@yahoo.com>
Message-ID: <7841a382-aede-4f19-a1ca-c897e7647338@e1g2000pra.googlegroups.com>
Source record: 3373

Hi All,

First of all, Happy New Year 2009 and wish you the Best on your radio activities and projects.

I like to inform you that our friend Martein, PA3AKE, has updated his web page on high performance analog front-end.
See the below sub-directories where you will find a lot of information and measurements on DDS.

http://www.xs4all.nl/~martein/pa3ake/hmode/index.html

Local Oscillator:

o Impact on Dynamic Range
o Design Choices
„X 1GHz Reference Clock
„X AD9910 Prototype Board
„X AD9910 and SSB-Noise
„X AD9910 and PM-Noise

o Sideband Noise Measurement
„X Reciprocal Mixing
„X Crystal Notch Filter
„X Quadrature Mixing

Best 73 and enjoy the visit

Gian
I7SWX

9. Re: Spectrum Analyser Using Tek 465

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-02 19:19:40 UTC
From: Chris Jones <lugnut808@yahoo.com>
Message-ID: <eNt7l.96766$9U2.48215@newsfe17.ams2>
Source record: 3374

Dale Parfitt wrote:

>
> "M0WYM" <Sansspam@peartreegreen.org> wrote in message
> news:gjd6fvhtk1@news.albasani.net...
>>I wonder if anyone knows of a project or kit that uses a 'scope timebase
>>output as the basis of an HF spectrum analyser. My aim is to make
>>something that would be useful for filter work so I'm not necessarily
>>looking for very wide frequency sweep.
>>
>> TIA,
>>
>>
>> Charlie.
>>
> Hi Charlie,
> For very little money, you can buy the miniVNA:
> http://www.miniradiosolutions.com/
>
> That will far outplay anything you can build. Because it makes use of a
> PC, it will have features well beyond a simple SA + tracking generator. In
> addition, it's a vector device.
>
> GL,
> Dale W4OP

You could build a N2PK VNA which is pretty accurate.

Chris

10. Re: 01 tube as RF amp..

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-03 18:12:07 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <c36de62a-322b-47d2-8cfc-5c9927d00dcc@a29g2000pra.googlegroups.com>
Source record: 3377

```
On Jan 1, 1:29 pm, K7ITM <k7...@msn.com> wrote:
> On Dec 31 2008, 7:16 pm, ken scharf <wa2mzeNOSPAMB...@bellsouth.net>
> wrote:
>
>
>
> > K7ITM wrote:
> > > On Dec 30, 2:54 pm, ken scharf <wa2mzeNOSPAMB...@bellsouth.net> wrote:
> > >> Tio Pedro wrote:
> > >>> "ken scharf" <wa2mzeNOSPAMB...@bellsouth.net> wrote in message
> > >>>news:Eqt6l.429$Y32.30@bignews8.bellsouth.net...
> > >>>> > Even with it's 'hard vacuum' the 01 didn't have as good a 'getter' as
> > >>>> later tubes and would arc over with more than 130 volts or so. It was
> > >>>> used as a transmitter before the type 202 tube became widely available,
> > >>>> but was a QRP thing, less than a watt input.
> > >>> Will it have enough output to drive a 245?
> > >> I'm sure it will drive a neutralized 245 to provide some gain.
> > >> You might not get enough drive for full power output from the 245.
> > >> (even if the 245 was run in class A, which requires NO driving power
> > >> you would still see SOME power gain).
>
> > > Hmmmm...You think class A at RF requires no driving power??
>
> > > Cheers,
> > > Tom
>
> > Only voltage, no current.
> > Of course some power gets wasted since resistance isn't zero and some
> > heat is generated in the coils, etc. I guess there is some power factor
> > in the grid / cathode capacitance etc. The input impedance of the '45
> > in class A SHOULD BE infinite. It isn't, but it IS VERY HIGH. So
> > except for losses, no driving power, only voltage.
>
> OK, to get an _accurate_ answer with respect to grid driving power,
> you need to account for the effects of the electrons going from
> cathode to plate as they pass by the grid. At high enough frequency,
> this becomes significant. This is quite apart from losses in elements
> external to the tube. One reference about this is Terman's "Radio
> Engineers' Handbook, section 4, paragraph 9. But just consider that
> it takes a certain amount of _energy_ to push those electrons around
> and control them, even if they don't actually ever come in contact
> with the grid.
>
> Cheers,
```

> Tom

Hey OM
I guess it's so ez to forget about the law. The law of conservation of energy.
You can't create or destroy energy. Physics 101.

73 OM
n8zu

11. Re: Spectrum Analyser Using Tek 465

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-03 18:41:41 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <f229cb0a-8de8-44cc-bd9b-91c484e07f22@y1g2000pra.googlegroups.com>
Source record: 3378

On Jan 2, 5:16 am, M0WYM <Sanss...@peartreegreen.org> wrote:
> JIMMIE wrote:
>
> <SNIP>
>
>
>
> > I had a little one band kit radio that was varactor tuned in my hands
> > for a while and used the sweep voltage from a scope to to drive the
> > varactors. I was interesting but the scope didnt have enogh
> > persistence to show a good display. It really looked cool when you
> > used a marker generator with it in a dark room.
>
> > JImmie
>
> Jimmie,
>
> That sounds like fun - I will have to try that with my BITX20A which
> I modding to varactor tuning
>
> Charlie.
>
> --
> M0WYMwww.radiowymsey.org
>
> Sign today!http://petitions.pm.gov.uk/SaveShortwave/

Hey OM
You'll have to find that sweet spot for the ramp sweep frequency,
depends on the bandwidth of the scope or the persistence of the crt.
The sweep bandwidth depends on the varactor tuning voltage, not on
the frequency. So you have to adjust the peak voltage of the ramp to
adjust the bandwidth. On the scope where X input is your ramp voltage
and Y input is the detected output of the tuner, with the sweep on the
scope turned off. The resolution will depend on the input bandwidth of
the tuner.

73 OM
n8zu

12. Multicast Tunneling Experiments

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-03 20:03:50 UTC
From: msg <msg@_cybertheque.org_>
Message-ID: <0e-dnbzibvuqWcLUnZ2dnUVZ_oWdnZ2d@posted.cpinternet>
Source record: 3381

I would like to experiment with delivery of receiver audio over the Internet to multicast receivers (clients); currently I use SIP and RTP (conventional VoIP calls and UnRealMedia streams) which establish a single session per listener, which is not the best use of bandwidth and rapidly saturates a slow pipe with multiple listeners. Multicast delivery of audio avoids this problem but is not widely implemented on the public Internet. However, folks who happen to have a LAN connected to the 'Net through a *nix box can run a multicast routing process (example, 'mrouted') to encapsulate and tunnel multicast packets between LANs. The MBone virtual multicast network (and similar projects) used this approach.

Would anyone care to set up a multicast tunnel with me for experiments? I am running 'mrouted [version 3.8,prune,genid,mtrace]' and can provide binaries and source code for whatever flavor of *ix you can run on your edge router, or if you have Cisco IOS that supports DVMRP, that would work well too.

Once connected, either side can deliver video and audio to multiple hosts on the other side using no more bandwidth than is required for a single unicast session. The BBC for example offers higher quality radio streams to users who access them over multicast as it conserves bandwidth and reduces cost, but in the U.S. there is less interest at the moment.

My receiver happens to be homebrew, which makes this request at least nominally on-topic ;)

TIA,

Michael

13. Re: 01 tube as RF amp..

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-03 21:05:14 UTC
From: Tio Pedro <radioconnection@cox.net>
Message-ID: <6qQ7l.70441$an4.16055@newsfe08.iad>
Source record: 3382

I've noticed a lot of the early designs from the late 20s
and early 30s used cathode bias (resistors to B- off the
directly heated filaments) on triode RF power
amplifiers. Were they adding a small amount of
bias to make them easier to drive? Or, for what reason?

One other thing, I don't remember seeing parasitic
suppressors on early rigs; did the need become
evident when TV became popular in the late
40s? I know those early TXs could take off in
the nether regions :)

Pete

14. www.08-trade.com supply cheap Nike, Adidas shoes, handbags, Sunglasses, Jeans, MP3, MP4, Psp, PS3, Watch, Tshirt, jordan, AF1, Dunk , Airmax, Shox, diesel, Puma, Juicy, chloe, PRADA, FENDI, LV, GUCCI, chanel, DIOR, Coach Etc Trade Co.ltd

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-04 12:11:14 UTC
From: bapetrading@hotmail.com
Message-ID: <acebaae2-e059-4843-8b30-629994984a62@r15g2000prd.googlegroups.com>
Source record: 3383

www.08-trade.com

About us

08-Trade Sporting Goods Co.,Ltd

Sport shoes world, wide choice of brand name shoes such as Nike
Jordan , Air Force, Max, Addidas, Timberland, Dunk, Prada

,ps3,etc. We have abundant experience of shoes exporting and we also
deal in clothes. If you are interested in our

products and want to business please contact us without delay. We
welcome customers from home and abroad. Wholesale or

retail is available.

Our company is located in Putian city, Fujian Province . It is famous
for its shoes exporting. We can offer you not only

competitive price but also good quality products. We'd like to
establish business relations with you on mutual benefit.

Thank you for the favor of your attention.

Mail : 08-trade@live.cn

MSN : 08trade@live.cn 08-trade@live.cn

15. Re: 01 tube as RF amp..

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-04 15:47:50 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <6P48l.2344$fE1.53@bignews3.bellsouth.net>
Source record: 3384

Tio Pedro wrote:
> I've noticed a lot of the early designs from the late 20s
> and early 30s used cathode bias (resistors to B- off the
> directly heated filaments) on triode RF power
> amplifiers. Were they adding a small amount of
> bias to make them easier to drive? Or, for what reason?
>
> One other thing, I don't remember seeing parasitic
> suppressors on early rigs; did the need become
> evident when TV became popular in the late
> 40s? I know those early TXs could take off in
> the nether regions :)
>
> Pete
>
>
Cathode bias resistors on rf power amps were a safety measure.
If the tube lost drive with no bias it could draw enough plate current
to MELT the plate, especially if run with a high voltage near (or OVER!)
the maximum ratings. Of course, using a C- supply would serve the
same purpose. Many rigs actually used batteries. Since the grid
current flowed in the reverse direction from the battery, a C battery
would actually be RECHARGED in normal use, so they tended to last a long
time.

Parasitic suppressors were not used in the early days since no one was
on the vhf frequencies there wasn't anybody to interfere with!

Actually, parasitic oscillation might show up in other ways making the
amplifier hard to load, and if detected this way the builder would take
steps to stabilize the circuit.

16. Re: 01 tube as RF amp..

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-04 16:00:28 UTC
From: Tio Pedro <radioconnection@cox.net>
Message-ID: <n258l.2786$716.144@newsfe13.iad>
Source record: 3385

"ken scharf" <wa2mzeNOSPAMBOTS@bellsouth.net> wrote in message
news:6P48l.2344$fE1.53@bignews3.bellsouth.net...
>>
> Cathode bias resistors on rf power amps were a safety measure.
> If the tube lost drive with no bias it could draw enough plate current to
> MELT the plate, especially if run with a high voltage near (or OVER!) the
> maximum ratings. Of course, using a C- supply would serve the
> same purpose. Many rigs actually used batteries. Since the grid current
> flowed in the reverse direction from the battery, a C battery would
> actually be RECHARGED in normal use, so they tended to last a long time.
>
> Parasitic suppressors were not used in the early days since no one was on
> the vhf frequencies there wasn't anybody to interfere with!
>
> Actually, parasitic oscillation might show up in other ways making the
> amplifier hard to load, and if detected this way the builder would take
> steps to stabilize the circuit.
>

The reason I asked this that Bill (Exray) ran
into some problems with his early TX project.
The old neon lamp trick showed
the presence of VHF parasitics, and adding suppressors
improved a few of the problems he was having.

We were discussing the use of cathode bias resistors, and
I couldn't quite grasp the reason for using them, but
tube protection makes sense.

Pete

17. 2.Inarilainen 23.12 ampiaiskato.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-06 03:50:00 UTC
From: Perttu Saari <perttu.saari@hyannis.com>
Message-ID: <g79gil$25s$4@113.121.1.10>
Source record: 3386

Kaupunkisuunnittelu [Sofia Williams, 08.05.2008]

Ensimm�inen ekokaupunki syntyy keskelle aavikkoa

Abu Dhabin l�helle rakennettava Masdar py�rii aurinkoenergialla ja lupaa vet�� 50 000 asukasta. Kaupunki ei tuota lainkaan hiilidioksidip��st�j�. �

T&T-Uutiskommentti [Kari Ojanper�, 08.05.2008]

Mets�n myynti tarvitsee oman tosi-tv:n

Mets�teollisuuden kannattaisi rakentaa mets�n omistamisesta ja puun myynnist� osakepelaamiseen verrattava kiva ja tuottoisa harrastus.
Mets�nomistajien jatkuva julkinen mollaaminen vie takuuvarmasti mets��n. �
Aiemmin verkkopalvelussa
Paperin yhdestoista hetki ly� jo �
Teollisuuden halpisretki Ven�j�n metsiin loppui �
Stora Enso peitti muut syyt puun hintaan �

Hiilidioksidi [Sofia Williams, 08.05.2008]

Islantilaiset kivett�v�t kasvihuonekaasuja vaarattomiksi

Ilmastoa l�mmitt�vien kasvihuonekaasujen karsimista yritet��n seuraavaksi kivett�m�ll� ja merenpohjan alle pakkaamalla. �

*No onnistuu se n�emm� ongelmitta, kun vaan edes yritet��n CO2 poistoa!

Suhdanteet [Jarmo Sepp�l�, 08.05.2008]

Volkswagen tuo s�hk�auton markkinoille jo 2010

Euroopan suurin autoyhti� ottaa kaupallisen s�hk�auton tuotantoon vuonna 2010. Auto on tyrkyll� suurkaupunkien ekoautoksi. �

Bioenergia [Jarmo Sepp�l�, 07.05.2008]

Turpeen poltto ajoi puun energiak�yt�n laskuun

L�mp�- ja voimalaitokset k�yttiv�t vuonna 2007 energiantuotantoon kiinteit� puupolttoaineita 12 prosenttia v�hemm�n ja mets�haketta 13 prosenttia v�hemm�n kuin vuotta aiemmin. P��syy k�yt�n v�henemiseen oli Metlan mukaan p��st�oikeuksien hintojen voimakas lasku, mik� lis�si etenkin turpeen polttoa. �

Strategia [Paula Launonen, 08.05.2008]

Kemira yhdenmukaistaa energiaostot
Suomalainen kemikaalij�tti tavoittelee yhten�ist� energiastrategiaa kaikilla mantereilla. Oma tuotanto vakauttaa asemaa ep�varmassa ymp�rist�ss�. �

*Mik� on vastuu lehdell� t�ll�isen MEGAGIKAdisinformaartiohuijauksensa julkaistessaan? Vai onko koko ankan ainoa tarkoitus katsoa kansan aktivisuutta reagoida sysimustaan valtiovalheeseen? Ett� SUPO/Sis�ministeri p��sisi selville maamme ydinvastustajien tasoista toimia ja noin.

****ALLERT sitten n�hd��n miten valtavisa harhoissa ydinalamme uraanikaivoksiaan maahamme on tekem�ss�, hei HALOOO!!! Jotain rajaa!!*****

Sotaj�lkien siivous [Raili Leino, 08.05.2008]

Sieni sitoo uraanin vaarattomaksi

*Lienee muuten maailmankaikkeuden ensimm�inen ja viimeinen sieni joka tuhoaa ALKUAINEITA 4,5miljardin vuoden s�teilykestokuormineen! Vaan jos lienee sellainen "Atomipommin r�j�hdyssieni " koko sekouutinen T�?!

Maaper�ss� esiintyv�t sienet voivat muuttaa ymp�rist�lle haitallisen k�yhdytetyn uraanin harmittomaksi. �

18. Re: testi-testi

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-06 08:45:10 UTC
From: "O.K." <kylkyl@juuriniin.com>
Message-ID: <qSE8l.21$8g5.20@read4.inet.fi>
Source record: 3387
Cross-posted to: sfnet.harrastus.autot.maahantuonti,sfnet.harrastus.tanssi,sfnet.tori.myydaan.muut,rec.radio.amateur.homebrew

Have I ever...

--

-o.k-

"Theo" <theodore.twyler@ntlworld.com> wrote in message
news:vg6%k.3804$3M4.1132@newsfe20.ams2...
> Have you Finnished?
>
>

19. Re: Paralleling computer power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-06 08:46:25 UTC
From: PhattyMo <phattymo@not.net>
Message-ID: <49631a4d$0$89875$815e3792@news.qwest.net>
Source record: 3388

DaveM wrote:
> "Tio Pedro" <radioconnection@cox.net> wrote in message
> news:7B96l.57095$X05.5123@newsfe03.iad...
>> Is there a feedback sensing line for voltage regulation
>> in the computer supplies that is accessible?
>> One trick I've seen done is to diode OR
>> the supplies, with the sense lines on the common
>> supply bus, after the diodes. MACom did this
>> on the massive switchers we used in our old fiber
>> nodes at work.
>>
>
> There are no sense lines available externally on a PC power supply.

Actually,Alot of ATX supplies have atleast a sense line on one of the
3.3V connections to the motherboard,IIRC it's usually brown,or
orange,and of a smaller gauge than the main wire.
I've seen some older Compaq server supplies that had sense lines on each
rail.

>You might
> take a look at the article on modding PC power supplies at
> http://www.pavouk.org/hw/en_atxps.html. It shows a typical schematic (albeit a
> bit aged now). Look at it and you can see where you might bring the sense lines
> out of a "master" unit and run them into the "slave" units. No guarantee that
> it will work, but I'd rather try that approach before the diode or resistor
> solutions.
> Of course, your PSUs will be different from the schematic in the web page, but
> it should be similar enough that you can figure it out.

20. Re: Kinkku otettu uunista

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-06 20:00:37 UTC
From: Reima Meyer <reima@viola.net>
Message-ID: <jozok.81$7d4.21@dorit.com>
Source record: 3389

S.K.22.05.2008."P�lytt�jien t�yskato uhkaa vied kes�n marjat. Omenapuut ja herukat kukkivat monin paikoin jo t�ysill, mutta puutarhoissa on hiljaista. P�lytt�ji ei ole liikkeell. S��n l�mpeneminenk��n ei lupaa helpotusta, sill luonnonvaraisten p�lytt�jien kannat ovat romahtaneet l�hes OLEMATTOMIIN! vaarassa ovat my�s mets�marjat, siel esim. mustikan, puolukan ja vadelman p�lytys on l�hes yksinomaan kimalaisten varassa.

Mehil�istenhoidonneuvoja Ari Sepp�l on kartoittanut p�lytt�jien tilannetta koko Suomessa. Uutiset ovat olleet yksinomaan HUONOJA! -arvioisin, ett kimalaisia ja ampiaisia on nyt korkeintaan KYMMENESOSA normaalista tasosta. Tutulla omenanviljelij�ll on tarhassaan tuhat kukivaa puuta. H�n ei ole n�hnyt t�n kev��n ensimm�ist�k��n kimalaista. Kimalaiset ja ampiaiset katosivat yll�tt�en Suomesta viime kes�m. Syyt katoon ei tiedet. Sepp�l ei usko tilanteen korjaantuvan edes seuraavana kes�n!"

Niin TUSKIN tarvitsee jatkaa? Poriin on yl�tuuleen matkaa TVO:lle jo yli 50km. Ja kuten todettiin 90% katoaluetta aina kukkak�rp�si my�ten on aivan hurjaa. (Huvittavinta, ett kyseiselle kaverille l�hetin vain parisen viikoa sitten tiedot ydinaavikoitumisfaktasta, ja KAS oivalteli! Ei sanan sanaa siit, ettei Suomella olisi mehil�isist ongelmia. Kiitokset Ari n�in netin kautta, oikeesti! no toisaalta kaverin netit kuulema turpoavat kiukkuisen kent�n kommentteja aiemmasta virhetiedotuksista! Taisi ryhm�kuri olla mukana.))) .. Ydinvoimalan p��st�t tappaa siis todetusti jo kautta Suomen! Joten H�VETK�� muuta t��ll aiemmin ved�telleet!

Vaikka t��ll yritet��n pajunk�ytt�� ties mit "varmaa" virus,punkki,bakteri,mit�lie tekaisua" toteenn�ytetyksi niin Sepp�l kuittaa t�llaiset luulot jopa yll�tt�en ilmoittamalla, ettei syist ole hajuja! Porissa vain muutamasta talvipes�st on jokusia punkkeja l�ytynmyt ja mehil�iskato on edelleen mysteeri. Niin.. .? Tai oikeammin tarkoittaa sit, ett YKSIK��N julkisuuden tautipelleilyharhautus ei vakuuta ket��n! Eli j�� j�ljelle j�lleen keran VAIN ne joista kuiskitaan ovien takana. Ydinionisaation aiheuttama suunnistuseksymiselle j�lleen tutusti pojot! Sanoi ydinklingonit mit lyst��! Outoa kapinointia kent�lt, jopa musta, ettei jotain ole tekaistu syyksi klassisista huijauksista, vaikka ydinala on parisen vuotta puukottanut? Lieneek vaan niin, ettei valheet mehil�iskasvattajiin en�� uoppoa, kun netiss puhelevat tiet�v�mm�t syyksi ydinavikoitumisia, ja beetasoihtup��st�j?)

21. Seeking New FAQ/Intro Maintainers for rec.radio.amateur.*

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-07 07:05:01 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/recruitment-1-1231311901@panix.com>
Source record: 3390
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/recruitment
Revision: 1.1 2007/09/29 18:42:47
Posting-Frequency: posted monthly
URL: http://www.faqs.org/faqs/radio/personal-intro/

Changes followed by "|".

The rec.radio.info newsgroup, first established in 1993, has been
recently revived by an active moderation team. We are currently seeking
suitable information, FAQ, and bulletin articles from the entire
rec.radio.* newsgroup hierarchy for simultaneous cross-posting to our
newsgroup.

We are seeking a replacement maintainer for the following information
bulletin formerly posted to rec.radio.amateur.* (and currently archived
at http://www.faqs.org/faqs/radio/personal-intro/ ):

radio/personal-intro
Subject: Guide to the rec.radio Newsgroups
Maintainer: jeffreyh@Hawaii.Edu (Jeffrey Herman)
Last Posted: 9 Nov 2001 06:18:17 GMT
Posting-Frequency: 15th of each month

We are willing to provide any technical support necessary to get this
article updated and automatically posted again at a regular interval.
This would include establishing contact with the original maintainer for
any necessary permissions. We would prefer to seek a new, dedicated
maintainer at this time, rather than start auto-posting the original
article ourselves.

For more information about our newsgroup, see:

http://www.panix.com/~rram/usenet/rri/index.html

Please direct any comments, questions, or criticisms to
rec-radio-info-request@panix.com.
```

22. 0.1" computer jumper crimping tool

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-07 18:47:30 UTC
From: "Ross, NS7F" <rjtucke@gmail.com>
Message-ID: <129625ae-cb30-4672-a46b-1f0c8502c84f@w24g2000prd.googlegroups.com>
Source record: 3391

Has anybody had any experience with those little cables used for connections on computer motherboards, typically to front panel LEDs, etc? The pins are 0.1" centered and would be extremely handy for routing +12v around while breadboarding stuff. I think the official name is IDT cables. However, whenever I search for them, I get the crimpers for the massive 40 or 80-conductor cables for ATA ribbons! I just want to make the little 2-3 conductor thingies...

Thanks for taking a look.

73 de Ross, NS7F

23. Re: 0.1" computer jumper crimping tool

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-07 19:06:27 UTC
From: JB <nospam@goofball.net>
Message-ID: <T279l.3782$BC4.2541@nwrddc02.gnilink.net>
Source record: 3392

"Ross, NS7F" <rjtucke@gmail.com> wrote in message
news:129625ae-cb30-4672-a46b-1f0c8502c84f@w24g2000prd.googlegroups.com...
> Has anybody had any experience with those little cables used for
> connections on computer motherboards, typically to front panel LEDs,
> etc? The pins are 0.1" centered and would be extremely handy for
> routing +12v around while breadboarding stuff. I think the official
> name is IDT cables. However, whenever I search for them, I get the
> crimpers for the massive 40 or 80-conductor cables for ATA ribbons! I
> just want to make the little 2-3 conductor thingies...
>
> Thanks for taking a look.
>
> 73 de Ross, NS7F

I have only seen these done on a machine. There are probably jaws available for crimpers but I would think it would be a total fumble since they are so small.

If you only need a few, then get them out of junk gear. You can get eye strain trying to chase stuff like that down on-line or in catalogs and have to pad for the minimum order .

24. Re: 0.1" computer jumper crimping tool

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-08 04:46:41 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <d7c8ccc1-2f0e-4d87-8de0-14e520c97a7f@y1g2000pra.googlegroups.com>
Source record: 3393

On Jan 7, 10:47 am, "Ross, NS7F" <rjtu...@gmail.com> wrote:
> Has anybody had any experience with those little cables used for
> connections on computer motherboards, typically to front panel LEDs,
> etc? The pins are 0.1" centered and would be extremely handy for
> routing +12v around while breadboarding stuff. I think the official
> name is IDT cables. However, whenever I search for them, I get the
> crimpers for the massive 40 or 80-conductor cables for ATA ribbons! I
> just want to make the little 2-3 conductor thingies...
>
> Thanks for taking a look.
>
> 73 de Ross, NS7F

"IDC" perhaps? "Insulation displacement connectors." The ones that go on ribbon cable can usually be installed using a vice, or perhaps even a pair of pliers for a small one. The ones I tend to use because they are available to me have loose contacts that crimp one at a time to wires that have been stripped, and then snap into bodies. I use them exactly as you suggest, for running power supply connections to little boards. Both DigiKey and Mouser catalogs have large connector sections, and I'm sure you can find appropriate ones in there.

Cheers,
Tom

25. Re: 0.1" computer jumper crimping tool

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-08 11:00:15 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <31l9l.460276$TT4.6927@attbi_s22>
Source record: 3394

"K7ITM" <k7itm@msn.com> wrote in message
news:d7c8ccc1-2f0e-4d87-8de0-14e520c97a7f@y1g2000pra.googlegroups.com...
On Jan 7, 10:47 am, "Ross, NS7F" <rjtu...@gmail.com> wrote:
> Has anybody had any experience with those little cables used for
> connections on computer motherboards, typically to front panel LEDs,
> etc? The pins are 0.1" centered and would be extremely handy for
> routing +12v around while breadboarding stuff. I think the official
> name is IDT cables. However, whenever I search for them, I get the
> crimpers for the massive 40 or 80-conductor cables for ATA ribbons! I
> just want to make the little 2-3 conductor thingies...
>
> Thanks for taking a look.
>
> 73 de Ross, NS7F

"IDC" perhaps? "Insulation displacement connectors." The ones that
go on ribbon cable can usually be installed using a vice, or perhaps
even a pair of pliers for a small one. The ones I tend to use because
they are available to me have loose contacts that crimp one at a time
to wires that have been stripped, and then snap into bodies. I use
them exactly as you suggest, for running power supply connections to
little boards. Both DigiKey and Mouser catalogs have large connector
sections, and I'm sure you can find appropriate ones in there.

Cheers,
Tom

And, after pinching the "tabs" on both the bared wire as well as the
insulation with a small pair of forceps for more years than I care to
remember, and being shocked at the $350 price tag for the tool for them in
Digi, I was directed to Jameco. They have

http://www.jameco.com/webapp/wcs/stores/servlet/ProductDisplay?langId=-1&storeId=10001&cat
alogId=10001&productId=159266&

(If that URL gets screwed up, it's their part number 159266. It crimps
nicely and curls the tabs around the conductor and pinches the ends into the
wire)
At $12.95, (Made you know where, but appears to be sturdy even after
considerable use), makes me want to cry that I hadn't found it earlier.

W4ZCB

26. Re: 0.1" computer jumper crimping tool

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-08 13:56:38 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <5aa89203-c469-427d-8c82-6a43133dd99e@w1g2000prm.googlegroups.com>
Source record: 3395

On Jan 7, 1:47 pm, "Ross, NS7F" <rjtu...@gmail.com> wrote:
> Has anybody had any experience with those little cables used for
> connections on computer motherboards, typically to front panel LEDs,
> etc? The pins are 0.1" centered and would be extremely handy for
> routing +12v around while breadboarding stuff. I think the official
> name is IDT cables. However, whenever I search for them, I get the
> crimpers for the massive 40 or 80-conductor cables for ATA ribbons! I
> just want to make the little 2-3 conductor thingies...

Ross -
There are 0.1" dual-row headers that use 0.05" spacing ribbon cables, and the connectors crimp on. These are "IDC" or "Insulation Displacement Connectors". You can assemble these with a little vise quite reliably. You don't often see these below 10 conductors, and I don't think this is what you are asking about because you want the connectors for 2 or 3 or 4 wires. But you'd be surprised how quickly you need an extra conductor here and there and pretty soon end up at 10. And they are so cheap and so reliably assembled that even though you don't need 10 conductors, you might want to use them anyway. As long as you line up the polarizing stripe on the cable with the socket, these are very reliably and very quickly assembled using nothing more than a vise.

There are also single-row headers as well as dual-row headers that use housings and discrete wires. These are "rectangular" connectors, and I think this is what you want. The board side is called a "header" and the wire side has a "housing" which holds the contacts. The contacts are crimped onto the wires and there are different contacts for different size wires. There are some specialized versions of these for terminating miniature coax. There are many manufacturers of housings and pins/sockets and crimpers and usually it's best to make sure that you are using all the matching stuff. Molex and AMP are the names to see in the catalogs. A "production" crimper can set you back many hundred dollars but a "prototype" crimper for $10-$20 is what you want. If you use a crimper that does not match the contact, the first time you tug on the wire the contact will stay in the housing and the wire will slide right out of the contact. So make sure you order matching crimper and housing and contacts.

It's real boring to terminate more than just onesy-twosy wires using the handheld crimpers. That's why the "IDC" versions for ribbon cable are so popular. Even though you're not asking for the IDC/ribbon cable versions, if I were you I'd seriously consider using them even though you don't think you need so many contacts.

There are also IDC versions of these single-row connectors for discrete wire termination. They only work reliably for very narrow wire ranges, and if you aren't working with exactly matching wires I'd advise that you stay away from them.

Tim N3QE

27. Re: 0.1" computer jumper crimping tool

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-08 18:56:04 UTC
From: Fred McKenzie <fmmck@aol.com>
Message-ID: <fmmck-9C242A.13560208012009@news.mixmin.net>
Source record: 3396

In article <31l9l.460276$TT4.6927@attbi_s22>,
"Harold E. Johnson" <W4ZCB@mchsi.com> wrote:

> And, after pinching the "tabs" on both the bared wire as well as the
> insulation with a small pair of forceps for more years than I care to
> remember, and being shocked at the $350 price tag for the tool for them in
> Digi, I was directed to Jameco. They have
>
> http://www.jameco.com/webapp/wcs/stores/servlet/ProductDisplay?langId=-1&store
> Id=10001&catalogId=10001&productId=159266&

Harold-

That tool looks a lot like the Radio Shack Catalog Number 64-410,
"Crimping Tool With Wire Cutter For Installing Solderless Terminals".
The Radio Shack tool has five crimp wells instead of two or three on the
Jameco Tool, and crimps 14 through 28 AWG terminals.

Fred
K4DII

28. Re: 0.1" computer jumper crimping tool

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-08 23:39:37 UTC
From: mzenier@eskimo.com
Message-ID: <gk82ea01rad@enews2.newsguy.com>
Source record: 3398

In article <129625ae-cb30-4672-a46b-1f0c8502c84f@w24g2000prd.googlegroups.com>,
Ross, NS7F <rjtucke@gmail.com> wrote:
>Has anybody had any experience with those little cables used for
>connections on computer motherboards, typically to front panel LEDs,
>etc? The pins are 0.1" centered and would be extremely handy for
>routing +12v around while breadboarding stuff. I think the official
>name is IDT cables. However, whenever I search for them, I get the
>crimpers for the massive 40 or 80-conductor cables for ATA ribbons! I
>just want to make the little 2-3 conductor thingies...
>
>Thanks for taking a look.

Try Jameco. They have '.100" Non-Polarized Connector Housings and Crimp
Pins' (Page 62 in the November 2008) catalog. (Part No. 100766 for
the female terminal, to disambiguate things). This is the closest (or
the same stuff) that I've seen to that used for computer reset button
wiring and the like. The recommended crimper is cheap, too at $12.95.

Another possible is the Molex KK line, with .100" spacing.

And for premium stuff, Dupont Berg Mini-PV, but if you have
to ask, you can't afford it.

Also many outfits (Molex, Panduit) have single row .100" inch
IDC connectors that take individual wires. (Newark?)

Mark Zenier mzenier@eskimo.com
Googleproofaddress(account:mzenier provider:eskimo domain:com)

29. Re: 0.1" computer jumper crimping tool

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-09 10:43:33 UTC
From: Leon <leon355@btinternet.com>
Message-ID: <4e73ca8b-961f-43f7-9347-68de62cef2a4@k36g2000yqe.googlegroups.com>
Source record: 3397

On 8 Jan, 18:56, Fred McKenzie <fm...@aol.com> wrote:
> In article <3119l.460276$TT4.6927@attbi_s22>,
> "Harold E. Johnson" <W4...@mchsi.com> wrote:
>
> > And, after pinching the "tabs" on both the bared wire as well as the
> > insulation with a small pair of forceps for more years than I care to
> > remember, and being shocked at the $350 price tag for the tool for them in
> > Digi, I was directed to Jameco. They have
>
> >http://www.jameco.com/webapp/wcs/stores/servlet/ProductDisplay?langId...
> > Id=10001&catalogId=10001&productId=159266&
>
> Harold-
>
> That tool looks a lot like the Radio Shack Catalog Number 64-410,
> "Crimping Tool With Wire Cutter For Installing Solderless Terminals".
> The Radio Shack tool has five crimp wells instead of two or three on the
> Jameco Tool, and crimps 14 through 28 AWG terminals.
>
> Fred
> K4DII

I use the same low-cost tool that I use for crimping Molex KK
terminals. It's not the right tool, but it works OK if I'm careful.

Leon

30. Noise power measurement...

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-09 20:17:50 UTC
From: Kari B <kba@nic.fi>
Message-ID: <8kO9l.116622$_03.110330@reader1.news.saunalahti.fi>
Source record: 3399

Hi all

I have got very simple noise source for receiver measurements, but
noise power verification makes some trouble...
Old analyzer noise floor is around -125dbm without input and noise power
using 10kHz BW is -95dbm using display 'peak' setting and long video
filter at 30MHz...

Same setup with display 'inf' setting shows -105dbm for the noise.

Sorry I don't have a manual for the analyzer to find what the 'inf'
means... but which value would be acceptable ?
I would use the first one ?

br Kari B

31. Re: 0.1" computer jumper crimping tool

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-10 15:08:35 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <bdabc36f-2259-41c0-9281-e5e33e9f201a@t39g2000prh.googlegroups.com>
Source record: 3400

>
> Try Jameco. They have '.100" Non-Polarized Connector Housings and Crimp
> Pins' (Page 62 in the November 2008) catalog. (Part No. 100766 for
> the female terminal, to disambiguate things). This is the closest (or
> the same stuff) that I've seen to that used for computer reset button
> wiring and the like. The recommended crimper is cheap, too at $12.95.
>

Hey OM
From a shortened URL the sockets are here online: http://tinyurl.com/8sr7ll
On that page there's a link to page 64 that lists the shells.

73 OM

n8zu

32. Kurukshetra '09

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-16 14:44:48 UTC
From: nandi <bodakka@gmail.com>
Message-ID: <35a3bbdb-0572-40ae-8730-4af3bad743d1@o40g2000prn.googlegroups.com>
Source record: 3404

Kurukshetra ’09, the annual international techno-management festival
of the College of Engineering, Guindy, Anna University, Chennai,
India, is here with a myriad of events to test your skills and
showcase your talents in front of some of the brightest brains of the
country.
Do check out Fox Hunt - A transmitter finding event for the amateur
radio enthusiast, this event is aimed at boosting the spirit of the
age old radio techniques. One of the best kept secrets in Ham radio,
Fox hunt is a fresh start to a new adventure.
This SCIENTIFIC GAME helps every enthusiast to gain knowledge about
radio direction finding, attenuation techniques and associated
concepts like direct signal and reflected signal detection,
orientation etc.
Visit the official site www.kurukshetra.org.in for more details.

33. no traffic here?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-17 05:59:34 UTC
From: Lynn <coffelt2@comcast.net>
Message-ID: <5Mqdnb1dj5da7uzUnZ2dnUVZ_vOdnZ2d@giganews.com>
Source record: 3405

Test to see if group is still alive in giganews

34. Re: no traffic here?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-17 06:33:46 UTC
From: dplatt@radagast.org
Message-ID: <ana846-ilj.ln1@radagast.org>
Source record: 3408

>Test to see if group is still alive in giganews

Seems to be!

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

35. Re: no traffic here?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-17 15:15:49 UTC
From: alchazz <no.spam@wanted.com>
Message-ID: <FCmcl.197$Aw2.42@nwrddc02.gnilink.net>
Source record: 3409

On Fri, 16 Jan 2009 21:59:34 -0800, Lynn wrote:

> Test to see if group is still alive in giganews

I thought you only used your ham radios. What are you doing on the
internet? ;-)

36. Re: 0.1" computer jumper crimping tool

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-17 17:54:14 UTC
From: JIMMIE <jimmie68@gmail.com>
Message-ID: <3ff489ca-dccf-467e-b84e-b0dfd3e0a42a@35g2000pry.googlegroups.com>
Source record: 3413

On Jan 7, 1:47 pm, "Ross, NS7F" <rjtu...@gmail.com> wrote:
> Has anybody had any experience with those little cables used for
> connections on computer motherboards, typically to front panel LEDs,
> etc? The pins are 0.1" centered and would be extremely handy for
> routing +12v around while breadboarding stuff. I think the official
> name is IDT cables. However, whenever I search for them, I get the
> crimpers for the massive 40 or 80-conductor cables for ATA ribbons! I
> just want to make the little 2-3 conductor thingies...
>
> Thanks for taking a look.
>
> 73 de Ross, NS7F

I use crimp on female RS 232 connectors
If you cant find a crimp tool they solder on very easily

Jimmie

37. Re: AY YI YI YI YES ITS THE PORKBUTT SONG

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-17 18:29:02 UTC
From: dloyd@gmail.com
Message-ID: <nd84n49hajptmcdcm3nkfk5rt1dosr3dg1@4ax.com>
Source record: 3414
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,alt.ham-radio.ssb,alt.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Tue, 23 Sep 2003 18:22:42 -0400, " BIG AL"
<bigal3.894.5@bigal3.894.5.com> wrote:

>BE ON 3894.5 TONITE. THE ARKANSAS BOYS NEED TO BE SHOWN THE DOOR. HO HO
>
>THE REST OF YOU LIMPS ONE NEED TO STAY AWAY. HO HO
>
>AY YI YI YI YES ITS THE PORKBUTT SONG
>
>AY YI YI YI YES ITS THE PORKBUTT SONG
>
>AY YI YI YI YES ITS THE PORKBUTT SONG
>

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

38. Re: SHOW ME YOUR LITTLE ONE AND I'LL SHOW YOU MY BIG ONE BOY

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-17 18:29:02 UTC
From: dloyd@gmail.com
Message-ID: <3e84n416cldpq6csql51dh501m3ilu3vq2@4ax.com>
Source record: 3415
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,alt.ham-radio.ssb,rec.radio.amateur.equipment,rec.radio.amateur.homebrew, rec.radio.amateur.misc,rec.radio.amateur.policy

On Tue, 23 Sep 2003 23:24:55 -0400, " BIG AL"
<bigal3.894.5@bigal3.894.5.com> wrote:

>THIS IS K4OKA THE CARING STATION. HO HO
>
>STOP PLAYING WITH YOURSELF BOY.
>
> HO HO
>
>

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

39. Re: SHOW ME YOUR LITTLE ONE AND I'LL SHOW YOU MY BIG ONE BOY

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-17 19:30:03 UTC
From: dloydlavies@hotmail.com
Message-ID: <bb65d8bf-375b-4cc6-a882-56a35763edbc@r27g2000vbp.googlegroups.com>
Source record: 3418
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Jan 17, 1:29 pm, dl...@gmail.com wrote:
> On Tue, 23 Sep 2003 23:24:55 -0400, " BIG AL"
>
> <bigal3.89...@bigal3.894.5.com> wrote:
> >THIS IS K4OKA THE CARING STATION. HO HO
>
> >STOP PLAYING WITH YOURSELF BOY.
>
> > HO HO
>
> "one useless man is disgrace 2 become a law firm 3 or more become a congress"
> adams
>
> woger you are a Congress all in your own head
>
> http://kb9rqz.bravejournal.com/
> altopia is never used by KB9RQZ
> nor is Konst...@hotmail.com ever
> btw i can be found at
> 17366 N River Rd
> Chassel Mi
>
> but the cowards asking lack the gut to act

Mark, KB9RQZ you are funny, trying to fool folks into thinking that
you are me by using "dloyd" but still posting under your Hughes
account and using your sig line....LOL

You are one kooky kook.

Have fun...while I sit back and laugh.

DL

40. Subminiature tube CK526AX

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-17 20:42:44 UTC
From: Fred <whru@msn.com>
Message-ID: <5439128a-3ccf-41d0-af62-54d1ef482737@v18g2000pro.googlegroups.com>
Source record: 3419

Hi,
I would like to use this tube for QRP purposes. Anybody out there with
schematics, plans, experience etc.?
Tnx
73
Fred

41. Re: Subminiature tube CK526AX

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-17 21:53:26 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <Inscl.5143$aO6.4736@bignews3.bellsouth.net>
Source record: 3420

Fred wrote:
> Hi,
> I would like to use this tube for QRP purposes. Anybody out there with
> schematics, plans, experience etc.?
> Tnx
> 73
> Fred
http://www.google.com/url?sa=t&source=web&ct=res&cd=3&url=http%3A%2F%2Fscottbecker.net%2Ftube%2Fsheets%2F138%2Fc%2FCK526AX.pdf&ei=H1FySZ-_Nsyatwebh8DnCA&usg=AFQjCNEzXT2dgcDMb_MLDmxc8HSgpnVOtA&sig2=S_kGJ8FaEJccu06qj-hsuA

seems to be a battery directly heated pentode / beam power tube.
Max ratings:
Vf = 1.25 +/- 20%
If = 20ma
Vp = 45v
Vg2 = 45v
Ik = 1ma

Typical operation:
Vp = 22.5v
Vg2 = 22.5v
Vg1 = -1.5v
Peak grid signal voltage 1.5v
Ip = .45ma
Ig2 = .12ma
Transconductance 400umhos
Rp = .22meg ohm
Rl = .05meg ohm
Distortion = 10%
Power out = 3.75mw

lead 1 = plate (red dot)
lead 2 = G2
lead 3 = F+
lead 4 = G1
lead 5 = F-

G3 (deflector plates) internally connected to filament.

42. UHF (70cm) PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-18 16:20:05 UTC
From: BV <bv@mailme.dk>
Message-ID: <6721ab92-e477-4bb7-96fa-5d6b176eb3c9@r41g2000prr.googlegroups.com>
Source record: 3421

Hi

Got a pair of MRF648 and would like to build a 100W 70cm PA running at
13,8V.
I have been looking for constructions/idéeas on Google without luck.
Anybody able to help me?

If You got an article i can use, please mail it to me: bv(--at..)
mailme.dk

MRF648 data:

DESCRIPTION:
The ASI MRF648 is Designed for
12.5 V UHF large signal amplifier
applications up to 512 MHz.

FEATURES:
. Internal Input Matching Network
. PG = 4.4 dB at 60 W/470 MHz
. OmnigoldT Metalization System

MAXIMUM RATINGS
IC 11 A
VCBO 36 V
VCEO 16 V
VEBO 4.0 V
PDISS 175 W @ TC = 25 °C
TJ -65 °C to +200 °C
TSTG -65 °C to +150 °C
?JC 1.0 °C/W

73 de OZ1BV, Brian

43. Re: UHF (70cm) PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-18 16:36:36 UTC
From: BV <bv@mailme.dk>
Message-ID: <77d3aaec-50e2-40fc-ab88-d864ffdf8555@y1g2000pra.googlegroups.com>
Source record: 3422

P.S. It's a linear amp i want to build

73 de OZ1BV, Brian

44. Re: Subminiature tube CK526AX

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-18 19:40:18 UTC
From: Fred <whru@msn.com>
Message-ID: <ccb161ce-b7c1-4e84-8434-cf5142dd28ec@k36g2000pri.googlegroups.com>
Source record: 3423

Thanks Ken,
now I'm looking for receiver and or transmitter circuits for this
tube.
Tnks
73
Fred.

45. Re: UHF (70cm) PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-19 03:24:59 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <ac592f5e-61b1-46b6-a52c-272db903daf7@w24g2000prd.googlegroups.com>
Source record: 3424
Body handling: HTML body converted to readable text

On Jan 18, 8:20 am, BV wrote:
> Hi
>
> Got a pair of MRF648 and would like to build a 100W 70cm PA running at
> 13,8V.
> I have been looking for constructions/idéeas on Google without luck.
> Anybody able to help me?
>
> If You got an article i can use, please mail it to me: bv(--at..)
> mailme.dk
>
> MRF648 data:
>
> DESCRIPTION:
> The ASI MRF648 is Designed for
> 12.5 V UHF large signal amplifier
> applications up to 512 MHz.
>
> FEATURES:
> . Internal Input Matching Network
> . PG = 4.4 dB at 60 W/470 MHz
> . OmnigoldT Metalization System
>
> MAXIMUM RATINGS
> IC 11 A
> VCBO 36 V
> VCEO 16 V
> VEBO 4.0 V
> PDISS 175 W @ TC = 25 °C
> TJ -65 °C to +200 °C
> TSTG -65 °C to +150 °C
> ?JC 1.0 °C/W
>
> 73 de OZ1BV, Brian

Hi Brian,

My Motorola data book says these are designed for class C (e.g. FM)
amplifier service, not linear. I suppose you should expect to get a
little less PEP power out of them in linear service, for good
linearity.

The Moto data sheet has a test circuit; I could scan it, if it would
be any use to you. The microstrip dimensions are for glass-teflon

board, er=2.55, 1/16" (1.6mm) thick. Of course, the test circuit is for a single transistor, not a pair. It is solidly class C: the base and emitter are both at DC ground.

Cheers,
Tom

46. Re: UHF (70cm) PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-19 06:00:45 UTC
From: Bob <biascomms@invalid.inv>
Message-ID: <6tij81Fb5r7cU1@mid.individual.net>
Source record: 3426

BV wrote:

> P.S. It's a linear amp i want to build
>
> 73 de OZ1BV, Brian

A bit of advice:

The Motorola data book suggests that these devices are designed for Class C service, and their design guide gives a circuit without DC bias. The Vbe max is only 4 Volts, which gives a useful hint!

Your DC bias circuit needs to /very/ accurately track temperature to prevent thermal runaway - the design of the bias circuit /will/ /not/ be trivial.

The gain of the circuit will be disappointing - you'll be lucky to get close to 10 dB - so the drive requirement will be surprisingly high.

If I was designing a UHF PA, I'd choose FETs these days!

Bob

47. Re: AY YI YI YI YES ITS THE PORKBUTT SONG

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-19 08:45:34 UTC
From: dloydlavies@hotmail.com
Message-ID: <ddf8n49tl3ig1pjh3a687gkevsio9usr2i@4ax.com>
Source record: 3427
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,alt.ham-radio.ssb,alt.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sat, 17 Jan 2009 13:29:02 -0500, dloyd@gmail.com wrote:

>On Tue, 23 Sep 2003 18:22:42 -0400, " BIG AL"
><bigal3.894.5@bigal3.894.5.com> wrote:
>
>>BE ON 3894.5 TONITE. THE ARKANSAS BOYS NEED TO BE SHOWN THE DOOR. HO HO
>>
>>THE REST OF YOU LIMPS ONE NEED TO STAY AWAY. HO HO
>>
>>AY YI YI YI YES ITS THE PORKBUTT SONG
>>
>>AY YI YI YI YES ITS THE PORKBUTT SONG
>>
>>AY YI YI YI YES ITS THE PORKBUTT SONG
>>
>
>"one useless man is disgrace 2 become a law firm 3 or more become a congress"
>adams
>
>woger you are a Congress all in your own head
>
>http://kb9rqz.bravejournal.com/
>altopia is never used by KB9RQZ
>nor is Konstans@hotmail.com ever
>btw i can be found at
>17366 N River Rd
>Chassel Mi
>
>but the cowards asking lack the gut to act

48. Re: UHF (70cm) PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-19 09:17:52 UTC
From: geek <geek@localhost.localdomain>
Message-ID: <pan.2009.01.19.09.17.52.302313@localhost.localdomain>
Source record: 3451

On Mon, 19 Jan 2009 06:00:45 +0000, Bob wrote:

<snip>

> If I was designing a UHF PA, I'd choose FETs these days!

Alas, if automobiles used 48V instead of 12 ;-)

Cheers!

49. Re: UHF (70cm) PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-19 10:32:10 UTC
From: BV <bv@mailme.dk>
Message-ID: <f536e4eb-bf0a-4a19-bfc5-dc68a7f950f8@p2g2000prn.googlegroups.com>
Source record: 3452

Hi Tom

> Hi Brian,
>
> My Motorola data book says these are designed for class C (e.g. FM)
> amplifier service, not linear. I suppose you should expect to get a
> little less PEP power out of them in linear service, for good
> linearity.
>
> The Moto data sheet has a test circuit; I could scan it, if it would
> be any use to you. The microstrip dimensions are for glass-teflon
> board, er=2.55, 1/16" (1.6mm) thick. Of course, the test circuit is
> for a single transistor, not a pair. It is solidly class C: the base
> and emitter are both at DC ground.
>
> Cheers,
> Tom- Skjul tekst i anførselstegn -
>
> - Vis tekst i anførselstegn -

This is correct, but I found out that Tokyo Hy-Power HL-120U uses
these transistors in this PA. If they are able to make a 100W linear
amp i hope to be able to do the same:-)
(The list where I figured out what transistor type is udes in PA's:
http://www.electronicpool.de/en/funkgeraetetypen.html)

I have not been able to find a schematic for HL-120U. It would be nice
to see how they designed the bias circuit.

Medt 73 de OZ1BV, Brian

50. Re: UHF (70cm) PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-19 11:24:33 UTC
From: Tio Pedro <radioconnection@cox.net>
Message-ID: <8qZcl.29187$qi.10872@newsfe09.iad>
Source record: 3453

"BV" <bv@mailme.dk> wrote in message
news:f536e4eb-bf0a-4a19-bfc5-dc68a7f950f8@p2g2000prn.googlegroups.com...
Hi Tom

> Hi Brian,
>
> My Motorola data book says these are designed for class C (e.g. FM)
> amplifier service, not linear. I suppose you should expect to get a
> little less PEP power out of them in linear service, for good
> linearity.
>
> The Moto data sheet has a test circuit; I could scan it, if it would
> be any use to you. The microstrip dimensions are for glass-teflon
> board, er=2.55, 1/16" (1.6mm) thick. Of course, the test circuit is
> for a single transistor, not a pair. It is solidly class C: the base
> and emitter are both at DC ground.
>
> Cheers,
> Tom- Skjul tekst i anf&#65533;rselstegn -
>
> - Vis tekst i anf&#65533;rselstegn -

This is correct, but I found out that Tokyo Hy-Power HL-120U uses
these transistors in this PA. If they are able to make a 100W linear
amp i hope to be able to do the same:-)
(The list where I figured out what transistor type is udes in PA's:
http://www.electronicpool.de/en/funkgeraetetypen.html)

I have not been able to find a schematic for HL-120U. It would be nice
to see how they designed the bias circuit.

Medt 73 de OZ1BV, Brian

You will find that the Mirage linears used the same family of
transistors as well.

pete

51. Re: UHF (70cm) PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-19 16:28:06 UTC
From: JIMMIE <jimmie68@gmail.com>
Message-ID: <c66d41d6-498b-4352-af48-bcea0a57776c@p2g2000prn.googlegroups.com>
Source record: 3454

On Jan 19, 4:17 am, geek <g...@localhost.localdomain> wrote:
> On Mon, 19 Jan 2009 06:00:45 +0000, Bob wrote:
>
> <snip>
>
> > If I was designing a UHF PA, I'd choose FETs these days!
>
> Alas, if automobiles used 48V instead of 12 ;-)
>
> Cheers!

48 volts is not that hard to do in an auto if you can mount a second
alternator. There is plenty of info on this on the web.

Jimmie

52. Re: UHF (70cm) PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-19 17:49:47 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrngn9f9q.2v41.bit-bucket@shell.config.com>
Source record: 3455

```
On Mon, 19 Jan 2009 01:17:52 -0800, geek wrote:
> On Mon, 19 Jan 2009 06:00:45 +0000, Bob wrote:
>
><snip>
>
>> If I was designing a UHF PA, I'd choose FETs these days!
>
> Alas, if automobiles used 48V instead of 12 ;-)

They will.

Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
38.24N 104.55W | @ config.com | Jonesy | OS/2
* Killfiling google & XXXXbanter.com: jonz.net/ng.htm
```

53. Re: Noise power measurement...

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-19 19:00:52 UTC
From: Fred McKenzie <fmmck@aol.com>
Message-ID: <fmmck-BA9A2A.14004819012009@news.mixmin.net>
Source record: 3456

In article <8kO9l.116622$_03.110330@reader1.news.saunalahti.fi>,
Kari B <kba@nic.fi> wrote:

> I have got very simple noise source for receiver measurements, but
> noise power verification makes some trouble...
> Old analyzer noise floor is around -125dbm without input and noise power
> using 10kHz BW is -95dbm using display 'peak' setting and long video
> filter at 30MHz...
>
> Same setup with display 'inf' setting shows -105dbm for the noise.
>
> Sorry I don't have a manual for the analyzer to find what the 'inf'
> means... but which value would be acceptable ?
> I would use the first one ?

Kari-

I was hoping your question would elicit comments from others who are
experienced in noise measurement.

Back in the 60s I had a job as a test technician. One assignment was to
measure noise power in an AM aircraft receiver. I didn't know anything
about noise, but had a procedure to follow.

As I recall, you set up the receiver with audio output that would drive
an AC voltmeter calibrated in dB. You were to inject a modulated signal
at the frequency where the receiver was tuned, and increase the signal
level until the audio output increased by 3 dB above the noise level.
The theory was that that signal power would be equal to the noise power
in the channel.

I still don't know much about noise measurement. I can see how this
test might be valid for an SSB or CW receiver, but doubt it was any more
than a go/no go test for the AM receiver.

In your case, wouldn't RMS noise measurement be required rather than
peak measurement?

Fred
K4DII

54. Re: UHF (70cm) PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-19 19:05:25 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <vij9n4df0u26qb682vkq3hgstv15uejn4i@4ax.com>
Source record: 3457

On 19 Jan 2009 17:49:47 GMT, Allodoxaphobia <bit-bucket@config.com>
wrote:

>On Mon, 19 Jan 2009 01:17:52 -0800, geek wrote:
>> On Mon, 19 Jan 2009 06:00:45 +0000, Bob wrote:
>>
>><snip>
>>
>>> If I was designing a UHF PA, I'd choose FETs these days!
>>
>> Alas, if automobiles used 48V instead of 12 ;-)
>
>They will.

A few years ago 42 V (3x14 V) was supposed to be the new automobile
voltage, but I have not heard much of it lately :-).

Paul OH3LWR

55. Re: Noise power measurement...

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-19 21:30:02 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <uh6dl.476486$TT4.304467@attbi_s22>
Source record: 3458

> I was hoping your question would elicit comments from others who are
> experienced in noise measurement.
>
> Back in the 60s I had a job as a test technician. One assignment was to
> measure noise power in an AM aircraft receiver. I didn't know anything
> about noise, but had a procedure to follow.
>
> As I recall, you set up the receiver with audio output that would drive
> an AC voltmeter calibrated in dB. You were to inject a modulated signal
> at the frequency where the receiver was tuned, and increase the signal
> level until the audio output increased by 3 dB above the noise level.
> The theory was that that signal power would be equal to the noise power
> in the channel.
>
> I still don't know much about noise measurement. I can see how this
> test might be valid for an SSB or CW receiver, but doubt it was any more
> than a go/no go test for the AM receiver.
>
> In your case, wouldn't RMS noise measurement be required rather than
> peak measurement?
>
> Fred
> K4DII

See G8KBB's website. Like to measure to 3 decimals?

W4ZCB

56. Re: UHF (70cm) PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-19 22:13:29 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <91645d22-5db2-4243-ada7-5718cc554708@r41g2000prr.googlegroups.com>
Source record: 3459

On Jan 19, 1:00 am, Bob <biasco...@invalid.inv> wrote:
> BV wrote:
> > P.S. It's a linear amp i want to build
>
> > 73 de OZ1BV, Brian
>
> A bit of advice:
>
>.....a circuit without DC bias. The Vbe max
> is only 4 Volts, which gives a useful hint!
>
Hey OM,

I don't thin so. The hint should be the input impedence is like less than 1 ohm. And although you may state that Vbe max is 4, that may apply in class C but not say class AB where the all yoiu will be doing is varying the current thru the base and the voltage will swing next to nothing, like a base swing current of 10 or more amps into the base impendence.

So you can't find a good schematic for a linear, I suggest you get a good spice program, and a really big smith chart.

I wouldn't use teflon board of any kind, when teflon burns it turns to mustard gas.

73 OM

n8zu

57. Re: Subminiature tube CK526AX

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-19 23:11:50 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <TJ7dl.5980$Ex.526@bignews8.bellsouth.net>
Source record: 3460

Fred wrote:
> Thanks Ken,
> now I'm looking for receiver and or transmitter circuits for this
> tube.
> Tnks
> 73
> Fred.
>
http://schmarder.com/radios/tube/index.htm
He has a project using a sub-mini tube that you could adapt

58. Re: 48V automotive systems -- WAS: [UHF (70cm) PA]

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-19 23:43:39 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrngna41b.1rce.bit-bucket@shell.config.com>
Source record: 3461

```
On Mon, 19 Jan 2009 21:05:25 +0200, Paul Keinanen wrote:
> On 19 Jan 2009 17:49:47 GMT, Allodoxaphobia wrote:
>>On Mon, 19 Jan 2009 01:17:52 -0800, geek wrote:
>>> On Mon, 19 Jan 2009 06:00:45 +0000, Bob wrote:
>>>
>>><snip>
>>>
>>>> If I was designing a UHF PA, I'd choose FETs these days!
>>>
>>> Alas, if automobiles used 48V instead of 12 ;-)
>>
>>They will.
>
> A few years ago 42 V (3x14 V) was supposed to be the new automobile
> voltage, but I have not heard much of it lately :-).

I read about the engineering and design that was going into the "new
48V automotive systems" in the IEEE Spectrum in the last year or so.

A brief Google search of ieee.org did not locate the article for me.

Jonesy
```

59. Re: 48V automotive systems -- WAS: [UHF (70cm) PA]

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-20 00:07:28 UTC
From: joeturn <joeturn2000@yahoo.com>
Message-ID: <e3442914-ea78-4cb5-803e-1def7252398d@k36g2000pri.googlegroups.com>
Source record: 3462

On Jan 19, 6:43 pm, Allodoxaphobia <bit-buc...@config.com> wrote:
> On Mon, 19 Jan 2009 21:05:25 +0200, Paul Keinanen wrote:
> > On 19 Jan 2009 17:49:47 GMT, Allodoxaphobia wrote:
> >>On Mon, 19 Jan 2009 01:17:52 -0800, geek wrote:
> >>> On Mon, 19 Jan 2009 06:00:45 +0000, Bob wrote:
>
> >>><snip>
>
> >>>> If I was designing a UHF PA, I'd choose FETs these days!
>
> >>> Alas, if automobiles used 48V instead of 12 ;-)
>
> >>They will.
>
> > A few years ago 42 V (3x14 V) was supposed to be the new automobile
> > voltage, but I have not heard much of it lately :-).
>
> I read about the engineering and design that was going into the "new
> 48V automotive systems" in the IEEE Spectrum in the last year or so.
>
> A brief Google search of ieee.org did not locate the article for me.
>
> Jonesy

http://search.yahoo.com/search;_ylt=A0geu.k3FXVJ4h8B_O1XNyoA?p=42+V+automobile&y=Search&fr=b1ie7

60. Re: no traffic here?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-20 00:15:37 UTC
From: joeturn <joeturn2000@yahoo.com>
Message-ID: <4e920021-3a6c-4676-a82e-c369f0fe0d38@a12g2000pro.googlegroups.com>
Source record: 3463

On Jan 17, 10:15 am, alchazz <no.s...@wanted.com> wrote:
> On Fri, 16 Jan 2009 21:59:34 -0800, Lynn wrote:
> > Test to see if group is still alive in giganews
>
> I thought you only used your ham radios. What are you doing on the
> internet? ;-)

dont have a radio

61. Re: UHF (70cm) PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-20 13:47:01 UTC
From: BV <bv@mailme.dk>
Message-ID: <89a9fc5b-1cd8-4978-978e-f2a7533223ab@g39g2000pri.googlegroups.com>
Source record: 3464

Hi folks

I found this: http://www.emartin.it/it9vky/Risorse/uhfpa/uhfpa.htm
Seems like a very good, even a PCB layout is downloadable...

Best 73 de OZ1BV, Brian

62. New Coaxial Products Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-20 19:17:29 UTC
From: Travis <TravisCurrier@gmail.com>
Message-ID: <a9fad34f-b514-444d-8ffd-507d18bbba44@y1g2000pra.googlegroups.com>
Source record: 3465

New Coaxial Products Catalog

CABLE ASSEMBLIESCONNECTORS**ADAPTERS**ATTENUATORS**RF COMPONENTS**TOOLS**BULK COAX CABLE**

NEW CATALOG:

http://www.aaarfproducts.com/catalog/CATALOGSmallFile.pdf

INVENTORY CLEARANCE SALE:

http://www.aaarfproducts.com/catalog/CSAAARF4.pdf

AAA RF Products
Phone: 949-481-3154
Email:sales@aaarfproducts.com
Website: www.aaarfproducts.com
Location: San Clemente, CA

63. Re: Noise power measurement...

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-20 19:56:09 UTC
From: Kari B <kba@nic.fi>
Message-ID: <bZpdl.121602$_03.25069@reader1.news.saunalahti.fi>
Source record: 3466

Fred McKenzie wrote:
> In article <8kO9l.116622$_03.110330@reader1.news.saunalahti.fi>,
> Kari B <kba@nic.fi> wrote:
>
>
>> I have got very simple noise source for receiver measurements, but
>> noise power verification makes some trouble...
>> Old analyzer noise floor is around -125dbm without input and noise power
>> using 10kHz BW is -95dbm using display 'peak' setting and long video
>> filter at 30MHz...
>>
>> Same setup with display 'inf' setting shows -105dbm for the noise.
>>
>> Sorry I don't have a manual for the analyzer to find what the 'inf'
>> means... but which value would be acceptable ?
>> I would use the first one ?
>>
>
> Kari-
>
> I was hoping your question would elicit comments from others who are
> experienced in noise measurement.
>
> Back in the 60s I had a job as a test technician. One assignment was to
> measure noise power in an AM aircraft receiver. I didn't know anything
> about noise, but had a procedure to follow.
>
> As I recall, you set up the receiver with audio output that would drive
> an AC voltmeter calibrated in dB. You were to inject a modulated signal
> at the frequency where the receiver was tuned, and increase the signal
> level until the audio output increased by 3 dB above the noise level.
> The theory was that that signal power would be equal to the noise power
> in the channel.
>
> I still don't know much about noise measurement. I can see how this
> test might be valid for an SSB or CW receiver, but doubt it was any more
> than a go/no go test for the AM receiver.
>
> In your case, wouldn't RMS noise measurement be required rather than
> peak measurement?
>
> Fred
> K4DII
>

Hello Fred

Ok, average value was a good point, power is usually measured in RMS. I believe it applies also to
wideband noise. Analyzer has also some own input noise, but noise source signal was quite much
almost 20dB above it so there is some gap.
I guess taking off the 'peak' display will give readings good enough.

br Kari B

64. Re: UHF (70cm) PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-20 21:06:17 UTC
From: Chris Jones <lugnut808@yahoo.com>
Message-ID: <61rdl.6$6p.3@newsfe30.ams2>
Source record: 3467

geek wrote:

> On Mon, 19 Jan 2009 06:00:45 +0000, Bob wrote:
>
> <snip>
>
>> If I was designing a UHF PA, I'd choose FETs these days!
>
> Alas, if automobiles used 48V instead of 12 ;-)
>
> Cheers!

A lot of stereos have a DC-DC converter to generate a supply voltage like that for the audio amplifier.

If you do build a DC-DC converter, then at least the output voltage could be well regulated and free of spikes, unlike an automotive "12V" supply. Of course quite a bit of shielding and LC filtering of the supply may be needed to stop the PA supply from having ripple that will cause AM sidebands on the Tx signal at an offset equal to the switcher frequency.

Chris

65. Re: no traffic here?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-21 03:54:16 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <f4ff4c40-b53c-4af2-aeb2-3ac6f8135e7d@r32g2000vba.googlegroups.com>
Source record: 3468

On Jan 19, 7:15 pm, joeturn <joeturn2...@yahoo.com> wrote:
> On Jan 17, 10:15 am, alchazz <no.s...@wanted.com> wrote:
>
> > On Fri, 16 Jan 2009 21:59:34 -0800, Lynn wrote:
> > > Test to see if group is still alive in giganews
>
> > I thought you only used your ham radios. What are you doing on the
> > internet? ;-)
>
> dont have a radio

Hey Om

What do you call that filling in your tooth? A crystal radio..

73 OM
n8zu

66. Re: New Coaxial Products Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-21 19:06:10 UTC
From: Dave <joe@somewhere.com>
Message-ID: <VICdnRQo6JC_7-rUnZ2dnUVZ_oTinZ2d@earthlink.com>
Source record: 3469

On Tue, 20 Jan 2009 11:17:29 -0800, Travis wrote:

> New Coaxial Products Catalog
>
> **CABLE ASSEMBLIES**CONNECTORS**ADAPTERS**ATTENUATORS**RF
> COMPONENTS**TOOLS**BULK COAX CABLE**
>
>
> NEW CATALOG:
>
> http://www.aaarfproducts.com/catalog/CATALOGSmallFile.pdf
>
> INVENTORY CLEARANCE SALE:
>
> http://www.aaarfproducts.com/catalog/CSAAARF4.pdf
>
>
> AAA RF Products
> Phone: 949-481-3154
> Email:sales@aaarfproducts.com
> Website: www.aaarfproducts.com
> Location: San Clemente, CA

Looks just like Pasternack's catalog

http://www.pasternack.com/DownloadCatalogs.aspx

67. Re: How to measure battery capacity?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-23 19:36:58 UTC
From: dloydlavies@gmail.com
Message-ID: <63kin4dminbvp7mufa8fcm9ev3f3ejbmi8@4ax.com>
Source record: 3470
Cross-posted to: rec.radio.amateur,alt.radio.amateur,alt.ham-radio,rec.ham-radio,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc

On Sun, 17 Aug 2003 18:17:36 -0400, "Bruce W.1" <bw@NoDirectMail.com>
wrote:

>I'm trying to find a way to measure the capacity of single -- mainly AA
>-- batteries. Some of my battery packs don't last as long as they
>should because of mismatches in cell capacity.
>
>I've got a good assortment of electronic equipment, variable power
>supplies, high power resistors, etc. I've even got a Maha MH-C777PLUS
>charger/discharger. But this doesn't let you do single cells.
>
>I can come up with some -- not so great -- ways to measure capacity,
>like discharging thru a resistor while monitoring voltage. This would
>allow me to at least match batteries somewhat but not really measure
>true capacity. For true capacity I need a constant current device, and
>that's where I'm stumped.
>
>This could be electronic, if it's inexpensive and I can get the parts at
>Radio Shack. But I'm thinking more along the lines of a mechanical
>device to drain the battery in a constant current fashion. An electric
>motor would just slow down, so that wouln't work. What type of
>mechanical device pulls a constant current regardless of input voltage?
>
>Does anyone have any suggestions on how to do this?
>
>Thanks for your help.

68. Re: Battery matching solution?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-23 19:36:58 UTC
From: dloydlavies@gmail.com
Message-ID: <k3kin4dqtedltd3qq4afr19qtk3pdi1j4j@4ax.com>
Source record: 3471
Cross-posted to: rec.radio.amateur,alt.radio.amateur,alt.ham-radio,rec.ham-radio,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc

On Mon, 18 Aug 2003 00:11:14 -0400, "Bruce W.1" <bw@NoDirectMail.com>
wrote:

>Please see previous thread.
>
>I'm trying to match AA battery capacities so they can be used together
>in battery packs and I think created a low-tech way to do this. I'd
>like to hear more informed opinions.
>
>This would apply to NiCads and NiMh but it should work with lithium-ions
>too.
>
>Take all your batteries of the same type and charge them all in parallel
>to the same voltage. Then one at a time remove them from the float
>voltage and attach them to a fixed size resistor (say 6 ohms) for a
>fixed period of time (say 3 hours) then measure their voltage. Well
>matched batteries should have similar voltages.
>
>Does this wash?
>
>The only thing I wonder about is the full charge state voltage. Say I'm
>doing Ni-Cads which usually top-out around 1.65 volts (where they
>experience a voltage drop), and I set the float voltage for the bunch at
>1.5 volts. Would the maximum voltage of each cell make a difference
>here?
>
>Thanks for your help.

69. Re: PA3AKE Project Update - DDS

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-23 20:21:02 UTC
From: carlos2007 <carlos2007.3c00476@radiobanter.com>
Message-ID: <carlos2007.3c00476@radiobanter.com>
Source record: 3472

Gian, I7SWX;662006 Wrote:
> Hi All,
>
> First of all, Happy New Year 2009 and wish you the Best on your radio
> activities and projects.
>
> I like to inform you that our friend Martein, PA3AKE, has updated his
> web page on high performance analog front-end.
> See the below sub-directories where you will find a lot of information
> and measurements on DDS.
>
> http://www.xs4all.nl/~martein/pa3ake/hmode/index.html
>
> Local Oscillator:
>
> o Impact on Dynamic Range
> o Design Choices
> „X 1GHz Reference Clock
> „X AD9910 Prototype Board
> „X AD9910 and SSB-Noise
> „X AD9910 and PM-Noise
>
> o Sideband Noise Measurement
> „X Reciprocal Mixing
> „X Crystal Notch Filter
> „X Quadrature Mixing
>
> Best 73 and enjoy the visit
>
> Gian
> I7SWX
sssssss

70. seeking "airdux" coil

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-24 19:45:03 UTC
From: Bob <someone@nospam.com>
Message-ID: <glfr41$d75$1@news.motzarella.org>
Source record: 3473

anybody have any airdux (or similar) coil stock they wish to part with
(cheap)?
Looking for something #16 wire, about 2" diameter, maybe 3" long. Needs to
be about 10 turns per inch.
Actually, if is is 2" diameter and 10 TPI, I need a 2" chunk for the 13-ish
uH needed.
It's for a 6146 homebrew transmitter final amp.
tnx,
Bob
kb8tl at yahoo dot com

71. Re: Battery matching solution?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-24 21:16:55 UTC
From: JB <nospam@goofball.net>
Message-ID: <bzLel.1756$Aw2.1450@nwrddc02.gnilink.net>
Source record: 3474

> >>I'm trying to match AA battery capacities so they can be used together
> >>in battery packs and I think created a low-tech way to do this. I'd
> >>like to hear more informed opinions.
> >>
> >>This would apply to NiCads and NiMh but it should work with lithium-ions
> >>too.
> >>
> >>Take all your batteries of the same type and charge them all in parallel
> >>to the same voltage. Then one at a time remove them from the float
> >>voltage and attach them to a fixed size resistor (say 6 ohms) for a
> >>fixed period of time (say 3 hours) then measure their voltage. Well
> >>matched batteries should have similar voltages.
> >>
> >>Does this wash?
> >>
> >>The only thing I wonder about is the full charge state voltage. Say I'm
> >>doing Ni-Cads which usually top-out around 1.65 volts (where they
> >>experience a voltage drop), and I set the float voltage for the bunch at
> >>1.5 volts. Would the maximum voltage of each cell make a difference
> >>here?
> >>
> >>Thanks for your help.
>
> Under the parallel charging scenario you outline you should be
> charging your NiCds with a CURRENT appropriate for the total amount of
> capacity you have in parallel. I'd suggest the cells be reasonably
> well charged before paralleling them for a final finishing charge.
>
> The Li-Ion cells are the ones you need to charge to a specific (and
> safe) voltage.
>
> Your discharge regime sounds OK, but in addition to a discharge for a
> certain length of time I'd continue that to the desired cutoff voltage
> for the cell in question and record the time required to reach that
> point. That will require you to be there and be more vigilant, but it
> will give a far better figure for cell comparison.
>
> You might want to plot voltage vs time at rather close intervals on at
> least one cell just to see how voltage changes over time. Do that and
> you'll probably see why I recommend measuring the time to a specific
> cutoff voltage.

Lithium Ions are odd.

For the others, It is best to stay with same model cells. They are not created equal. It is pretty easy to just make the pack and do your testing with the MAHA, then throw out the cells that fall down first. I have the Radio Shack/MAHA and sometimes it doesn't detect properly until the pack gets going.

I have a handful of surplus NiMh 1ah AA cells that I constantly rotate and they get used in cameras, radios, flashlights and anything else. They were tab type that I pulled the tabs off and soldered a blob of Silver solder on the plus to make them fit in holders. Been using them for at least 5 years now.

72. Re: PA3AKE Project Update - DDS

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-24 21:38:39 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <f630ab16-e843-4bb5-830e-9aa852eb8a99@q18g2000vbn.googlegroups.com>
Source record: 3475

On Jan 2, 11:46 am, "Gian, I7SWX" <i7...@yahoo.com> wrote:
> Hi All,
>
> First of all, Happy New Year 2009 and wish you the Best on your radio
> activities and projects.
>
> I like to inform you that our friend Martein, PA3AKE, has updated his
> web page on high performance analog front-end.
> See the below sub-directories where you will find a lot of information
> and measurements on DDS.
>
> http://www.xs4all.nl/~martein/pa3ake/hmode/index.html
>
> Local Oscillator:
>
> o Impact on Dynamic Range
> o Design Choices
> „X 1GHz Reference Clock
> „X AD9910 Prototype Board
> „X AD9910 and SSB-Noise
> „X AD9910 and PM-Noise
>
> o Sideband Noise Measurement
> „X Reciprocal Mixing
> „X Crystal Notch Filter
> „X Quadrature Mixing
>
> Best 73 and enjoy the visit
>
> Gian
> I7SWX

Hey OM

One of the instructions for an FM transmitter using the AD chip is:
wait for interrupt and loop forever, this thing will be rocking at 1
giga samples per second.

Think I could put one of these chips in my yl?

73 OM
de n8zu

73. Re: UHF (70cm) PA

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-25 02:00:25 UTC
From: highlandham <rfburns@nospam.com>
Message-ID: <r_mdnUuZRaRGWubUnZ2dnUVZ8vednZ2d@pipex.net>
Source record: 3476

geek wrote:
> On Mon, 19 Jan 2009 06:00:45 +0000, Bob wrote:
>
> <snip>
>
>> If I was designing a UHF PA, I'd choose FETs these days!
>
> Alas, if automobiles used 48V instead of 12 ;-)
================
Switch Mode converter 12V ------> 48 V

Frank KN6WH / GM0CSZ

74. Re: seeking "airdux" coil

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-25 02:04:46 UTC
From: NoSPAM <unknown@nospam.org>
Message-ID: <bNPel.13972$k57.13909@newsfe09.iad>
Source record: 3477

"Bob" <someone@nospam.com> wrote in message
news:glfr41$d75$1@news.motzarella.org...
> anybody have any airdux (or similar) coil stock they wish to part with
> (cheap)?
> Looking for something #16 wire, about 2" diameter, maybe 3" long. Needs
> to be about 10 turns per inch.
> Actually, if is is 2" diameter and 10 TPI, I need a 2" chunk for the
> 13-ish uH needed.
> It's for a 6146 homebrew transmitter final amp.
> tnx,
> Bob
> kb8tl at yahoo dot com

Have you ever thought about winding your own? Find something of the right diameter - PVC pipe, wood dowel, cardboard roll, etc. Wrap it with waxed paper, then wind the wire on it tightly holding the ends down with tape. Mix up some epoxy (24-hour cure will be stronger and more flexible, but 5-minute epoxy will also work). Apply the mixed epoxy to your coil in lines about 1/4 inch wide. Use at least six lines to make a sturdy coil. Let the epoxy cure for several hours to overnight depending on the epoxy chosen. Carefully withdraw the form and unroll the waxed paper from the inside of the coil. It's really simple to do and you have a real homebrew rig.

Make sure you use bare copper or tinned copper wire if you have to tap the coil. If you use bare copper, do not use polyester resin instead of the epoxy as it will not cure properly. I won't say why, but instead leave this as a mystery for the readers of this newsgroup.

73, Dr. Barry L. Ornitz WA4VZQ
BLOrnitz84@charter.net [transpose the digits to reply]

75. How about this one Unk??

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-25 02:06:44 UTC
From: joeturn <joeturn2000@yahoo.com>
Message-ID: <c3e64747-e692-42f4-a6d1-7e1355982578@j39g2000yqn.googlegroups.com>
Source record: 3478

http://groups.google.com/group/rec.gambling.poker/browse_thread/thread/ba9da4f2e926e620#

76. Re: How to measure battery capacity?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-25 02:37:52 UTC
From: highlandham <rfburns@nospam.com>
Message-ID: <k_6dnXd-5cU-TebUnZ2dnUVZ8oGWnZ2d@pipex.net>
Source record: 3479
Cross-posted to: rec.radio.amateur,alt.radio.amateur,alt.ham-radio,rec.ham-radio,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc

dloydlavies@gmail.com wrote:
> On Sun, 17 Aug 2003 18:17:36 -0400, "Bruce W.1" <bw@NoDirectMail.com>
> wrote:
>
>> I'm trying to find a way to measure the capacity of single -- mainly AA
>> -- batteries. Some of my battery packs don't last as long as they
>> should because of mismatches in cell capacity.
>>
>> I've got a good assortment of electronic equipment, variable power
>> supplies, high power resistors, etc. I've even got a Maha MH-C777PLUS
>> charger/discharger. But this doesn't let you do single cells.
==========
Are you sure ? A Maha MH-C777 I have does single 1.2 V cells.

Frank KN6WH / GM0CSZ

77. Re: seeking "airdux" coil

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-25 02:44:06 UTC
From: Bill M <radioexray@geemail.com>
Message-ID: <glgjls02990@news2.newsguy.com>
Source record: 3480

NoSPAM wrote:
> "Bob" <someone@nospam.com> wrote in message
> news:glfr41$d75$1@news.motzarella.org...
>> anybody have any airdux (or similar) coil stock they wish to part with
>> (cheap)?

>
> Have you ever thought about winding your own? Find something of the
> right diameter - PVC pipe, wood dowel, cardboard roll, etc. Wrap it
> with waxed paper, then wind the wire on it tightly holding the ends down
> with tape. Mix up some epoxy (24-hour cure will be stronger and more
> flexible, but 5-minute epoxy will also work). Apply the mixed epoxy to
> your coil in lines about 1/4 inch wide. Use at least six lines to make
> a sturdy coil. Let the epoxy cure for several hours to overnight
> depending on the epoxy chosen. Carefully withdraw the form and unroll
> the waxed paper from the inside of the coil. It's really simple to do
> and you have a real homebrew rig.

Thats my plan. I cannot afford the real air/mini-dux. :(

http://www.sparkbench.com/homebrew/grebe/rear.jpg

Forget the epoxy and use Duco Cement.

"polyester resin instead of the epoxy as it will not cure properly. I
won't say why, but instead leave this as a mystery for the readers of
this newsgroup."

For me the Duco Cement has always held better than epoxy.

-Bill

78. Re: seeking "airdux" coil

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-25 02:58:50 UTC
From: Tio Pedro <radioconnection@cox.net>
Message-ID: <XzQel.209641$2w3.201491@newsfe19.iad>
Source record: 3481

I'm not sure if you thought of this, but there are
a few guys who do nothing but part out Heathkits
and sell the parts on eBay. Right now there's a
DX-40 PA coil going for a few bucks. I've seen
tons of AirDux styles (such as the DX-40), and
also fiberglas and ceramic tanks from later
Heathkits. I picked up a PA tank (ceramic form)
for a TX project I'm planning. Often the PA
tank switch is included, along with the standoff
insulators. Worth a shot if nothing pans out here.

Pete k1zjh

79. Re: How to measure battery capacity?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-25 11:58:24 UTC
From: dloydlavies@hotmail.com
Message-ID: <00d6348d-9524-427b-9ed8-990cd2374fae@r34g2000vbp.googlegroups.com>
Source record: 3482
Cross-posted to: alt.ham-radio,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc
Body handling: HTML body converted to readable text

On Jan 24, 9:37 pm, highlandham wrote:
> dloydlav...@gmail.com wrote:
> > On Sun, 17 Aug 2003 18:17:36 -0400, "Bruce W.1"
> > wrote:
>
> >> I'm trying to find a way to measure the capacity of single -- mainly AA
> >> -- batteries. Some of my battery packs don't last as long as they
> >> should because of mismatches in cell capacity.
>
> >> I've got a good assortment of electronic equipment, variable power
> >> supplies, high power resistors, etc. I've even got a Maha MH-C777PLUS
> >> charger/discharger. But this doesn't let you do single cells.
>
> ==
> Are you sure ? A Maha MH-C777 I have does single 1.2 V cells.
>
> Frank KN6WH / GM0CSZ

Frank, don't respond to dloydlavies@gmail.com, this address is false
and is not an active address, this person is actually Mark Morgan
KB9RQZ, who is flooding/disrupting usenet as usual, as you can see the
original post is from 2003.

Feel free to report Mr. Morgan to abuse@giganews.com, and to Google
Groups

and to Google citing his other addresses
kb9rqz@aprs.com
kb9rqz_ars@hotmail.com
kb9rqz@yahoo.com
konstans@hotmail.com
kb9rqz__ars@hotmail.com
a_old_friends@yahoo.com
kb9rqz___ars@hotmail.com
kb9rqz@hotmail.com
upperpenarmyguy@yahoo.com
kb9rqz-ars@hotmail.com
kb9rqz_ars@yahoo.com
kb9rqz@markmorgan.com
kb9rqz@markmorgan.net
kb9rqz@amsat.org
kb9rqz--ars@hotmail.com
kb9rqz-MCM@hotmail.com

80. Re: How to measure battery capacity?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-25 12:06:09 UTC
From: dloydlavies@hotmail.com
Message-ID: <37a4eb73-cb40-4861-aae5-f02931de0b30@t3g2000yqa.googlegroups.com>
Source record: 3483
Cross-posted to: alt.ham-radio,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc
Body handling: HTML body converted to readable text

On Jan 25, 6:58 am, dloydlav...@hotmail.com wrote:
> On Jan 24, 9:37 pm, highlandham wrote:
>
>
>
>
>
> > dloydlav...@gmail.com wrote:
> > > On Sun, 17 Aug 2003 18:17:36 -0400, "Bruce W.1"
> > > wrote:
>
> > >> I'm trying to find a way to measure the capacity of single -- mainly AA
> > >> -- batteries. Some of my battery packs don't last as long as they
> > >> should because of mismatches in cell capacity.
>
> > >> I've got a good assortment of electronic equipment, variable power
> > >> supplies, high power resistors, etc. I've even got a Maha MH-C777PLUS
> > >> charger/discharger. But this doesn't let you do single cells.
>
> > ==========
> > Are you sure ? A Maha MH-C777 I have does single 1.2 V cells.
>
> > Frank KN6WH / GM0CSZ
>
> Frank, don't respond to dloydlav...@gmail.com, this address is false
> and is not an active address, this person is actually Mark Morgan
> KB9RQZ, who is flooding/disrupting usenet as usual, as you can see the
> original post is from 2003.
>
> Feel free to report Mr. Morgan to ab...@giganews.com, and to Google
> Groups
>
> and to Google citing his other addresses
> kb9...@aprs.com
> kb9rqz_...@hotmail.com
> kb9...@yahoo.com
> konst...@hotmail.com
> kb9rqz__...@hotmail.com
> a_old_frie...@yahoo.com
> kb9rqz___...@hotmail.com
> kb9...@hotmail.com

> upperpenarmy...@yahoo.com
> kb9rqz-...@hotmail.com
> kb9rqz_...@yahoo.com
> kb9...@markmorgan.com
> kb9...@markmorgan.net
> kb9...@amsat.org
> kb9rqz--...@hotmail.com
> kb9rqz-...@hotmail.com

and don't forget to add Mark@kb9rqz.org
>
> - Show quoted text -

81. Re: seeking "airdux" coil

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-25 13:55:40 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <8d00d6f2-f0a1-449d-b8b9-d0836880ffe9@f40g2000pri.googlegroups.com>
Source record: 3484

On Jan 24, 9:58 pm, "Tio Pedro" <radioconnect...@cox.net> wrote:
> I'm not sure if you thought of this, but there are
> a few guys who do nothing but part out Heathkits
> and sell the parts on eBay. Right now there's a
> DX-40 PA coil going for a few bucks. I've seen
> tons of AirDux styles (such as the DX-40), and
> also fiberglas and ceramic tanks from later
> Heathkits. I picked up a PA tank (ceramic form)
> for a TX project I'm planning. Often the PA
> tank switch is included, along with the standoff
> insulators. Worth a shot if nothing pans out here.
>
> Pete k1zjh

Hey OM

I don't know about that, I bought an airdux coil off of ebay came
with the catalog spec sheet for airdux coils
The guy listed it as a 100 watt rated coil turned out to be a 1000
watt coil verified by the spec sheet that came with it Although I'll
say this nobody else bid on it. And sometimes they use other ebayers
pictures and tell you yup what you see is what you get. And the
picture isn't a picture of the item.

Personally I would roll my own. The trick that not to many people know
about epoxy is: heat it up first in a microwave oven, so hot that you
can't touch it. Then mix it.
I roll up a newspaper, in my case junk mail advertizing flyers, for
the coil form, you can get any diameter you want this way.

Good luck and 73 OM
de n8zu

82. Re: seeking "airdux" coil

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-25 15:05:09 UTC
From: Tio Pedro <radioconnection@cox.net>
Message-ID: <Vc%el.149558$H12.23013@newsfe12.iad>
Source record: 3485

"raypsi" <RBorowiak@gmail.com> wrote in message
news:8d00d6f2-f0a1-449d-b8b9-d0836880ffe9@f40g2000pri.googlegroups.com...
On Jan 24, 9:58 pm, "Tio Pedro" <radioconnect...@cox.net> wrote:
> I'm not sure if you thought of this, but there are
> a few guys who do nothing but part out Heathkits
> and sell the parts on eBay. Right now there's a
> DX-40 PA coil going for a few bucks. I've seen
> tons of AirDux styles (such as the DX-40), and
> also fiberglas and ceramic tanks from later
> Heathkits. I picked up a PA tank (ceramic form)
> for a TX project I'm planning. Often the PA
> tank switch is included, along with the standoff
> insulators. Worth a shot if nothing pans out here.
>
> Pete k1zjh

Hey OM

I don't know about that, I bought an airdux coil off of ebay came
with the catalog spec sheet for airdux coils
The guy listed it as a 100 watt rated coil turned out to be a 1000
watt coil verified by the spec sheet that came with it Although I'll
say this nobody else bid on it. And sometimes they use other ebayers
pictures and tell you yup what you see is what you get. And the
picture isn't a picture of the item.
Good luck and 73 OM
de n8zu

You misread what I said. My advice was to look for a PA
tank that was salvaged from a DX-40, DX-60, HW-101, etc.
Not NOS AirDux stock. Unfortunately there seems to be a
lot of folks chopping these old rigs up for parts and selling
them off piece meal. The early DX series used AirDux
like coils, and they are already tapped for the five original
HF bands. There isn't a big market for them so they
sell cheap.

Pete

83. Re: seeking "airdux" coil

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-25 15:32:15 UTC
From: Bert Hyman <bert@iphouse.com>
Message-ID: <Xns9B9E61059DB51VeebleFetzer@216.250.184.7>
Source record: 3486

In news:glgjls02990@news2.newsguy.com Bill M <radioexray@geemail.com>
wrote:

> I cannot afford the real air/mini-dux. :(

This thread prompted me to look at B&W's Web site.

The price of the real Airdux is breathtaking.

A single piece of the 1610TL (10" long, 2" diameter, 10tpi, 16 gauge
wire) that the OP is looking for is $100.

Even the lesser-rated 3027 Miniductor is a hefty $40.

http://www.bwantennas.com/coils/aduxlex.htm
http://www.bwantennas.com/coils/mini.htm

--
Bert Hyman St. Paul, MN bert@iphouse.com

84. Re: seeking "airdux" coil

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-25 16:03:33 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <GY%el.736$pq.138@bignews1.bellsouth.net>
Source record: 3487

Bert Hyman wrote:
> In news:glgjls02990@news2.newsguy.com Bill M <radioexray@geemail.com>
> wrote:
>
>> I cannot afford the real air/mini-dux. :(
>
> This thread prompted me to look at B&W's Web site.
>
> The price of the real Airdux is breathtaking.
>
> A single piece of the 1610TL (10" long, 2" diameter, 10tpi, 16 gauge
> wire) that the OP is looking for is $100.
>
> Even the lesser-rated 3027 Miniductor is a hefty $40.
>
> http://www.bwantennas.com/coils/aduxlex.htm
> http://www.bwantennas.com/coils/mini.htm
>
Even inflation doesn't account for those prices!
In 1967 I bought some mini-inductor stock for building a receiver
project from PE magazine. The #3016 mini-inductor was $1.03 and the
#3013 was $0.63 each. Today, they are listed on the website at $60 and
$20 each! Over a 50X increase in price! Inflation over some 40 years
wasn't THAT bad (or gas would be over $15/gal today).

Note that the web site implies that they are no longer making the coils
anymore, and that a 'special order' might be involved.

85. Re: seeking "airdux" coil

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-25 20:25:49 UTC
From: mzenier@eskimo.com
Message-ID: <glklst01mq@enews2.newsguy.com>
Source record: 3491

In article <bNPel.13972$k57.13909@newsfe09.iad>,
NoSPAM <unknown@nospam.org> wrote:
>"Bob" <someone@nospam.com> wrote in message
>news:glfr41$d75$1@news.motzarella.org...
>> anybody have any airdux (or similar) coil stock they wish to part with
>> (cheap)?
>> Looking for something #16 wire, about 2" diameter, maybe 3" long. Needs
>> to be about 10 turns per inch.
>> Actually, if is is 2" diameter and 10 TPI, I need a 2" chunk for the
>> 13-ish uH needed.
>> It's for a 6146 homebrew transmitter final amp.
>> tnx,
>> Bob
>> kb8tl at yahoo dot com
>
>Have you ever thought about winding your own? Find something of the right
>diameter - PVC pipe, wood dowel, cardboard roll, etc. Wrap it with waxed
>paper, then wind the wire on it tightly holding the ends down with tape.
>Mix up some epoxy (24-hour cure will be stronger and more flexible, but
>5-minute epoxy will also work). Apply the mixed epoxy to your coil in
>lines about 1/4 inch wide. Use at least six lines to make a sturdy coil.
>Let the epoxy cure for several hours to overnight depending on the epoxy
>chosen. Carefully withdraw the form and unroll the waxed paper from the
>inside of the coil. It's really simple to do and you have a real homebrew
>rig.
>
>Make sure you use bare copper or tinned copper wire if you have to tap the
>coil. If you use bare copper, do not use polyester resin instead of the
>epoxy as it will not cure properly. I won't say why, but instead leave
>this as a mystery for the readers of this newsgroup.

suggestions.

1) Fiberglass perf board is drilled on .1 centers so you can cut a piece
down the middle of the holes, a bit of hacksaw work if needed, and use
it as a comb spacer glued from the outside.

2) just cut several .2 inch strips of perf board with a row of holes in
the middle, start at one end and feed a preformed slinky of the wire so
that the strips space and support it.

2 is less work than 1, but it's real hard to get it nice looking.

3) Another way is to wind with a second wire used as an interleave,
hot glue both wires and then pull out the second wire, (insulated
which doesn't take the glue as well as the bare wire and stranded for

flexability), from the inside after removed from the forming dowel.
For transmitters, you'd probably need to treat the hot glue as a
temporary scaffold and use a better glue for the final structure.

Mark Zenier mzenier@eskimo.com
Googleproofaddress(account:mzenier provider:eskimo domain:com)

86. Re: How to measure battery capacity?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-26 01:22:40 UTC
From: dloydlavies@hotmail.com
Message-ID: <u24qn4t2scdens91tv34ne44kfp6h0v38j@4ax.com>
Source record: 3488
Cross-posted to: rec.radio.amateur,alt.radio.amateur,alt.ham-radio,rec.ham-radio,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc

On Fri, 23 Jan 2009 14:36:58 -0500, dloydlavies@gmail.com wrote:

>On Sun, 17 Aug 2003 18:17:36 -0400, "Bruce W.1" <bw@NoDirectMail.com>
>wrote:
>
>>I'm trying to find a way to measure the capacity of single -- mainly AA
>>-- batteries. Some of my battery packs don't last as long as they
>>should because of mismatches in cell capacity.
>>
>>I've got a good assortment of electronic equipment, variable power
>>supplies, high power resistors, etc. I've even got a Maha MH-C777PLUS
>>charger/discharger. But this doesn't let you do single cells.
>>
>>I can come up with some -- not so great -- ways to measure capacity,
>>like discharging thru a resistor while monitoring voltage. This would
>>allow me to at least match batteries somewhat but not really measure
>>true capacity. For true capacity I need a constant current device, and
>>that's where I'm stumped.
>>
>>This could be electronic, if it's inexpensive and I can get the parts at
>>Radio Shack. But I'm thinking more along the lines of a mechanical
>>device to drain the battery in a constant current fashion. An electric
>>motor would just slow down, so that wouln't work. What type of
>>mechanical device pulls a constant current regardless of input voltage?
>>
>>Does anyone have any suggestions on how to do this?
>>
>>Thanks for your help.

87. Re: Battery matching solution?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-26 01:22:57 UTC
From: dloydlavies@hotmail.com
Message-ID: <g34qn4to0dek1bd90f0k0ln3jcndtdfllp@4ax.com>
Source record: 3489
Cross-posted to: rec.radio.amateur,alt.radio.amateur,alt.ham-radio,rec.ham-radio,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc

On Fri, 23 Jan 2009 14:36:58 -0500, dloydlavies@gmail.com wrote:

>On Mon, 18 Aug 2003 00:11:14 -0400, "Bruce W.1" <bw@NoDirectMail.com>
>wrote:
>
>>Please see previous thread.
>>
>>I'm trying to match AA battery capacities so they can be used together
>>in battery packs and I think created a low-tech way to do this. I'd
>>like to hear more informed opinions.
>>
>>This would apply to NiCads and NiMh but it should work with lithium-ions
>>too.
>>
>>Take all your batteries of the same type and charge them all in parallel
>>to the same voltage. Then one at a time remove them from the float
>>voltage and attach them to a fixed size resistor (say 6 ohms) for a
>>fixed period of time (say 3 hours) then measure their voltage. Well
>>matched batteries should have similar voltages.
>>
>>Does this wash?
>>
>>The only thing I wonder about is the full charge state voltage. Say I'm
>>doing Ni-Cads which usually top-out around 1.65 volts (where they
>>experience a voltage drop), and I set the float voltage for the bunch at
>>1.5 volts. Would the maximum voltage of each cell make a difference
>>here?
>>
>>Thanks for your help.

88. Re: seeking "airdux" coil

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-26 13:12:12 UTC
From: ReasonableMan <ReasonableMen..com>
Message-ID: <tdWdnZ9-X6E2K-DUnZ2dnUVZ_uKWnZ2d@giganews.com>
Source record: 3490

SUPPLY AND DEMAND....
That is the only thing the really counts.....

"ken scharf" <wa2mzeNOSPAMBOTS@bellsouth.net> wrote in message
news:GY%el.736$pq.138@bignews1.bellsouth.net...
> Bert Hyman wrote:
>> In news:glgjls02990@news2.newsguy.com Bill M <radioexray@geemail.com>
>> wrote:
>>> I cannot afford the real air/mini-dux. :(
>>
>> This thread prompted me to look at B&W's Web site.
>>
>> The price of the real Airdux is breathtaking. A single piece of the
>> 1610TL (10" long, 2" diameter, 10tpi, 16 gauge
>> wire) that the OP is looking for is $100. Even the lesser-rated 3027
>> Miniductor is a hefty $40.
>>
>> http://www.bwantennas.com/coils/aduxlex.htm
>> http://www.bwantennas.com/coils/mini.htm
>>
> Even inflation doesn't account for those prices!
> In 1967 I bought some mini-inductor stock for building a receiver project
> from PE magazine. The #3016 mini-inductor was $1.03 and the #3013 was
> $0.63 each. Today, they are listed on the website at $60 and $20 each!
> Over a 50X increase in price! Inflation over some 40 years wasn't THAT
> bad (or gas would be over $15/gal today).
>
> Note that the web site implies that they are no longer making the coils
> anymore, and that a 'special order' might be involved.

89. Re: seeking "airdux" coil

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-26 17:27:22 UTC
From: JIMMIE <jimmie68@gmail.com>
Message-ID: <27debf34-8ef0-4b0e-8115-518dfd7bb397@z28g2000prd.googlegroups.com>
Source record: 3492
Body handling: HTML body converted to readable text

On Jan 25, 9:32 am, Bert Hyman wrote:
> Innews:glgjls02990@news2.newsguy.comBill M
> wrote:
>
> > I cannot afford the real air/mini-dux. :(
>
> This thread prompted me to look at B&W's Web site.
>
> The price of the real Airdux is breathtaking.
>
> A single piece of the 1610TL (10" long, 2" diameter, 10tpi, 16 gauge
> wire) that the OP is looking for is $100.
>
> Even the lesser-rated 3027 Miniductor is a hefty $40.
>
> http://www.bwantennas.com/coils/aduxlex.htmhttp://www.bwantennas.com/coils/mini.htm
>
> --
> Bert Hyman St. Paul, MN b...@iphouse.com

Getting set up to fabricate these coils may be a good garage business
for someone. I made some one time utilizing a metal dowel that already
had four groves spaced a 90 degress. I wrapped the wire around the
dowel and filled the grove with resin. This worked fairly decent. Im
sure that someone who already had some metal working tools could
fabricate similar setup or probably come up with something better to
set up an "as required" production line.

Jimmie

90. Re: Battery matching solution?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-27 01:02:58 UTC
From: highlandham <rfburns@nospam.sco>
Message-ID: <BJqdnVDwcunZwOPUnZ2dnUVZ8tzinZ2d@pipex.net>
Source record: 3493

JB wrote:
>>>> I'm trying to match AA battery capacities so they can be used together
>>>> in battery packs and I think created a low-tech way to do this. I'd
>>>> like to hear more informed opinions.
>>>>
>>>> This would apply to NiCads and NiMh but it should work with lithium-ions
>>>> too.
>>>>
>>>> Take all your batteries of the same type and charge them all in parallel
>>>> to the same voltage. Then one at a time remove them from the float
>>>> voltage and attach them to a fixed size resistor (say 6 ohms) for a
>>>> fixed period of time (say 3 hours) then measure their voltage. Well
>>>> matched batteries should have similar voltages.
>>>>
>>>> Does this wash?
>>>>
>>>> The only thing I wonder about is the full charge state voltage. Say I'm
>>>> doing Ni-Cads which usually top-out around 1.65 volts (where they
>>>> experience a voltage drop), and I set the float voltage for the bunch at
>>>> 1.5 volts. Would the maximum voltage of each cell make a difference
>>>> here?
>>>>
>>>> Thanks for your help.
>> Under the parallel charging scenario you outline you should be
>> charging your NiCds with a CURRENT appropriate for the total amount of
>> capacity you have in parallel. I'd suggest the cells be reasonably
>> well charged before paralleling them for a final finishing charge.
>>
>> The Li-Ion cells are the ones you need to charge to a specific (and
>> safe) voltage.
>>
>> Your discharge regime sounds OK, but in addition to a discharge for a
>> certain length of time I'd continue that to the desired cutoff voltage
>> for the cell in question and record the time required to reach that
>> point. That will require you to be there and be more vigilant, but it
>> will give a far better figure for cell comparison.
>>
>> You might want to plot voltage vs time at rather close intervals on at
>> least one cell just to see how voltage changes over time. Do that and
>> you'll probably see why I recommend measuring the time to a specific
>> cutoff voltage.
>
> Lithium Ions are odd.
>

> For the others, It is best to stay with same model cells. They are not
> created equal. It is pretty easy to just make the pack and do your testing
> with the MAHA, then throw out the cells that fall down first. I have the
> Radio Shack/MAHA and sometimes it doesn't detect properly until the pack
> gets going.
>
> I have a handful of surplus NiMh 1ah AA cells that I constantly rotate and
> they get used in cameras, radios, flashlights and anything else. They were
> tab type that I pulled the tabs off and soldered a blob of Silver solder on
> the plus to make them fit in holders. Been using them for at least 5 years
> now.
==========
Nicad and NimH cells not regularly used can be best continously tickle
charged at 10 -40 mA depending on size/capacity.
Example : I have a Wahl cordless battery powered soldering iron 2.4 V (2
cells) which is continously trickle charged at 10 mA . When in use the
charge rate is switched to 300 mA.

Frank KN6WH / GM0CSZ

91. Re: seeking "airdux" coil

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-27 03:40:34 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <76f42369-997a-44e2-9e62-3ca49c6058d5@u18g2000pro.googlegroups.com>
Source record: 3494

On Jan 25, 10:05 am, "Tio Pedro" <radioconnect...@cox.net> wrote:
> "raypsi" <RBorow...@gmail.com> wrote in message
>
> news:8d00d6f2-f0a1-449d-b8b9-d0836880ffe9@f40g2000pri.googlegroups.com...
> On Jan 24, 9:58 pm, "Tio Pedro" <radioconnect...@cox.net> wrote:
>
> > I'm not sure if you thought of this, but there are
> > a few guys who do nothing but part out Heathkits
> > and sell the parts on eBay. Right now there's a
> > DX-40 PA coil going for a few bucks. I've seen
> > tons of AirDux styles (such as the DX-40), and
> > also fiberglas and ceramic tanks from later
> > Heathkits. I picked up a PA tank (ceramic form)
> > for a TX project I'm planning. Often the PA
> > tank switch is included, along with the standoff
> > insulators. Worth a shot if nothing pans out here.
>
> > Pete k1zjh
>
> Hey OM
>
> I don't know about that, I bought an airdux coil off of ebay came
> with the catalog spec sheet for airdux coils
> The guy listed it as a 100 watt rated coil turned out to be a 1000
> watt coil verified by the spec sheet that came with it Although I'll
> say this nobody else bid on it. And sometimes they use other ebayers
> pictures and tell you yup what you see is what you get. And the
> picture isn't a picture of the item.
> Good luck and 73 OM
> de n8zu
>
> You misread what I said. My advice was to look for a PA
> tank that was salvaged from a DX-40, DX-60, HW-101, etc.
> Not NOS AirDux stock. Unfortunately there seems to be a
> lot of folks chopping these old rigs up for parts and selling
> them off piece meal. The early DX series used AirDux
> like coils, and they are already tapped for the five original
> HF bands. There isn't a big market for them so they
> sell cheap.
>
> Pete

Hey OM

I think yoiu mis read what I wrote. I'm just slamming ebay, not what you should or shouldn't be looking for.
Towit if you see a pix of a coil pulled from a rig and the description says its from that rig, doesn't mean it's the truth the whole truth and nothing but the truth.You'd be better off using craigslist.com. When using ebay it's like dropping a bar of soap in the shower in jail.

73 OM
de n8zu

92. Re: seeking "airdux" coil

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-27 03:55:28 UTC
From: Bill M <radioexray@geemail.com>
Message-ID: <glm0jg01fcm@news4.newsguy.com>
Source record: 3495

raypsi wrote:
> On Jan 25, 10:05 am, "Tio Pedro" <radioconnect...@cox.net> wrote:
>> "raypsi" <RBorow...@gmail.com> wrote in message
>>
>> news:8d00d6f2-f0a1-449d-b8b9-d0836880ffe9@f40g2000pri.googlegroups.com...
>> On Jan 24, 9:58 pm, "Tio Pedro" <radioconnect...@cox.net> wrote:
>>
>>> I'm not sure if you thought of this,
>
> I think yoiu mis read what I wrote. I'm just slamming ebay, not what
> you should or shouldn't be looking for.
> Towit if you see a pix of a coil pulled from a rig and the description
> says its from that rig, doesn't mean it's the truth the whole truth
> and nothing but the truth.You'd be better off using craigslist.com.
> When using ebay it's like dropping a bar of soap in the shower in
> jail.
>
> 73 OM
> de n8zu

Yeah, pete. What were you thinking? Real homebrewers don't use
ebay...craigslist is better.

93. Re: seeking "airdux" coil

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-27 04:18:02 UTC
From: geek <geek@localhost.localdomain>
Message-ID: <pan.2009.01.27.04.18.02.6659@localhost.localdomain>
Source record: 3496

On Mon, 26 Jan 2009 07:12:12 -0600, ReasonableMan wrote:

> SUPPLY AND DEMAND....
> That is the only thing the really counts.......

And stupid consumers.

94. Re: Battery matching solution?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-01-27 20:11:00 UTC
From: JB <nospam@goofball.net>
Message-ID: <oTJfl.90$N5.23@nwrddc01.gnilink.net>
Source record: 3497

"highlandham" <rfburns@nospam.sco> wrote in message
news:BJqdnVDwcunZwOPUnZ2dnUVZ8tzinZ2d@pipex.net...
> JB wrote:
> >>>> I'm trying to match AA battery capacities so they can be used
together
> >>>> in battery packs and I think created a low-tech way to do this. I'd
> >>>> like to hear more informed opinions.
> >>>>
> >>>> This would apply to NiCads and NiMh but it should work with
lithium-ions
> >>>> too.
> >>>>
> >>>> Take all your batteries of the same type and charge them all in
parallel
> >>>> to the same voltage. Then one at a time remove them from the float
> >>>> voltage and attach them to a fixed size resistor (say 6 ohms) for a
> >>>> fixed period of time (say 3 hours) then measure their voltage. Well
> >>>> matched batteries should have similar voltages.
> >>>>
> >>>> Does this wash?
> >>>>
> >>>> The only thing I wonder about is the full charge state voltage. Say
I'm
> >>>> doing Ni-Cads which usually top-out around 1.65 volts (where they
> >>>> experience a voltage drop), and I set the float voltage for the bunch
at
> >>>> 1.5 volts. Would the maximum voltage of each cell make a difference
> >>>> here?
> >>>>
> >>>> Thanks for your help.
> >> Under the parallel charging scenario you outline you should be
> >> charging your NiCds with a CURRENT appropriate for the total amount of
> >> capacity you have in parallel. I'd suggest the cells be reasonably
> >> well charged before paralleling them for a final finishing charge.
> >>
> >> The Li-Ion cells are the ones you need to charge to a specific (and
> >> safe) voltage.
> >>
> >> Your discharge regime sounds OK, but in addition to a discharge for a
> >> certain length of time I'd continue that to the desired cutoff voltage
> >> for the cell in question and record the time required to reach that
> >> point. That will require you to be there and be more vigilant, but it
> >> will give a far better figure for cell comparison.
> >>

> >> You might want to plot voltage vs time at rather close intervals on at
> >> least one cell just to see how voltage changes over time. Do that and
> >> you'll probably see why I recommend measuring the time to a specific
> >> cutoff voltage.
> >
> > Lithium Ions are odd.
> >
> > For the others, It is best to stay with same model cells. They are not
> > created equal. It is pretty easy to just make the pack and do your
testing
> > with the MAHA, then throw out the cells that fall down first. I have
the
> > Radio Shack/MAHA and sometimes it doesn't detect properly until the pack
> > gets going.
> >
> > I have a handful of surplus NiMh 1ah AA cells that I constantly rotate
and
> > they get used in cameras, radios, flashlights and anything else. They
were
> > tab type that I pulled the tabs off and soldered a blob of Silver solder
on
> > the plus to make them fit in holders. Been using them for at least 5
years
> > now.
> ==
> Nicad and NimH cells not regularly used can be best continously tickle
> charged at 10 -40 mA depending on size/capacity.
> Example : I have a Wahl cordless battery powered soldering iron 2.4 V (2
> cells) which is continously trickle charged at 10 mA . When in use the
> charge rate is switched to 300 mA.
>
> Frank KN6WH / GM0CSZ
>

I have one of those too. The originals were NiCad ? mAH, Then the 1.2 AH
fast charge cells, but this last replacement bunch are NiMh 3 AH cells that
I pulled out of a new Radio Shack race car battery. This has never gone
dead on me even after sitting a month in the tool box. I have both the
original charger and the Orange one that is just enough for a decent charge
but has no idea when to shut off. NiMh don't mind being topped off, but
don't like to be hit really hard like NiCads do.

95. Looking for dead HP848x RF power sensor head

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-01 01:05:19 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <b0b9e9c2-e7c9-4779-b71e-2d94e98f2db4@o11g2000yql.googlegroups.com>
Source record: 3498

I'm looking for a dead HP848_ (e.g., 8482A) power sensor head that someone just hasn't gotten around to throwing out yet. I'm just looking for the connector to the cable to the power meter box, actually. Anyone??

Cheers,
Tom
k7itm

96. WIA 'Amateur Radio' 10m FM Tcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-04 18:57:26 UTC
From: John <jrw>
Message-ID: <5MSdnThvLMVIeRTUnZ2dnUVZ8u6dnZ2d@posted.plusnet>
Source record: 3499

Hello folks,

I read with interest on this web page http://blog.marxy.org/ about an article in WIA's Amateur Radio featuring a 10m FM transceiver design using an AD9851 and an ATmega16. Does anyone have a copy of this article (and the source code) so I could have a look at it please?

73

John

--
www.wells10000.plus.com/m5aml
--

- - - -

97. 2SC2509 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-05 20:12:36 UTC
From: Theo <theodore.twyler@ntlworld.com>
Message-ID: <YKHil.8275$aJ3.8054@newsfe23.ams2>
Source record: 3500

Anyone out there know where I can buy a couple of 2SC2509 transistors?
Any help will be greatly appreciated.

Theo

98. Re: 2SC2509 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-05 21:26:43 UTC
From: DaveM <masondg4499@comcast99.net>
Message-ID: <GvednVQGVYYIxBbUnZ2dnUVZ_u2dnZ2d@giganews.com>
Source record: 3301

"Theo" <theodore.twyler@ntlworld.com> wrote in message
news:YKHil.8275$aJ3.8054@newsfe23.ams2...
> Anyone out there know where I can buy a couple of 2SC2509 transistors?
> Any help will be greatly appreciated.
>
> Theo
>

These sites indicate that they have stock:
http://www.mcmelectronics.com/product/2SC2509
and
http://www.ceitron.com/semi/semi.phtml?part=2SC2509+

--
Dave M
MasonDG44 at comcast dot net (Just substitute the appropriate characters in the address)

Life is like a roll of toilet paper; the closer it gets to the end, the faster it goes.

99. Re: 2SC2509 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-05 22:31:58 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <RoednavOHpJC9RbUnZ2dnUVZ_vSdnZ2d@bright.net>
Source record: 3302

Theo wrote:
> Anyone out there know where I can buy a couple of 2SC2509 transistors?
> Any help will be greatly appreciated.
>
> Theo
>
>

It says "Call" for price and they have a $25 minimum order, but at least
they might have them...

http://www.rfparts.com/transistors_2SC.html#2458

Scott
N0EDV

100. Re: Kubuntusta

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-06 02:17:24 UTC
From: Toni Karppinen <toni@metall.de>
Message-ID: <yl_ck.29839$_03.3892@225.233.113.121>
Source record: 3303

M.T.09.05-08.Tanskan insin��riliitossa uskotaan uusiutuvaan energiaan "Energiasuunnitelma 2030"- nimisen raportin (ES). Sen tekoon osallistui 1 600 insin��ri� ja muita energia-asiantuntijoita. ES:st� sijoitukset uudisenergiaan ovat ekologisesti ja taloudellisesti hyvin perusteltuja. Samoin varteenotettavia vientimahdollisuuksia. Uudisenergia tulee rajusti lis��ntym��n. Tanska p��see v.2030 pitk�lle kokonaan uudisenergiaan. Arvellaan 50% osuutta jo silloin.

Kasvihuonep��st�ist� poistuu 60% ja n�in s��styy 15 miljardia kruunua/v. Investointitulojen kasvuksi 30 miljardista 160 miljardiin v-30. S��st�� 845 petajoulesta 580 petajouleen. Suomessa 1 400 petajoulea. Teollisuus voi v�hent�� 30%! S��st�� t�st� 6 miljardia kruunua. Takaisinmaksuaika investoinneista 6-7 vuodessa. T�h�n budjetti 107 milj. euroa. Rakennusten energiankulutuksen puolitus 2030. 15% tulisi aurinkoenergiasta. S�hk�st� pois 40%. Jo 2020 j�lkeen rakennettavien talojen arvioidaan olevan JO energianeutraalin. Energias��st�s��ti��n pannaan miljardi kruunua.

Liikenne Tanskassa viel� kasvaa 2%/v. Siit� tullaan poistamaan 20% nykytasosta korvaamalla siit� biopolttoaineella. Viidennes s�hk�autoihin. Rautateille lis�yst�. Verotus suosimaan ymp�rist�yst�v�llisi� autoja. Kuljetuksiin 200 miljardia kruunua l. 27miljardia. V�hent�en terveydenhuoltoa, ruuhkien ja ymp�rist�nsuojelun menot. Huomattavasti nykyist� suurempi osuus uusiutuvista l�hteist�. Tuulipuolella Tanska suuntaa merien offshoretuulivoimaan. ES:n tavoite on kaksinkertaistaa tuulivoimaansa s�hk�st� huikeaan 60 prosenttiin!!!

Aurinkosoluille 2030 ennakoidaan 2% ja aaltovoiman 5% s�hk�ntuotannosta. Aaltovoimaa pidet��n eritt�in merkitt�v�n�. Biomassasta ennakoidaan 30% v.2030. Mukana biopolttoaineiden 20%. Biokaasuun luotetaan, samoin uuden sukupolven biopolttoaineisiin. N�ihin Tanska sijoittaa paljon. Biopolttoainesektorikasvaa 20 miljardiin kruunuun 2,7miljardiin euroon. Kolmannes 2030 voimaloista k�ytt�� jo tehokkaita polttokennoja ja l�mp�pumput ovat arkilaitteita. Tutkimuksiin nostetaan 350 miljoonasta miljardiin kruunuun. Valtio kevitt�� uudisenergiainvestointiriskitt�m�mpi� sy�tt�tariffeja. "Saastuttaja maksaa periaatteella!"(Suomessa ydinalalle moinen olisi ennenkokematonta!)

Suositellaan luopumista verotuksesta joka est�� siirtymist� fossiileista uudisenergiaan. Lentopetrolille veroa. Tanskassa on oleellisesti helpompaa toteuttaa uutta energiapolitiikkaa. Valitettavasti meill� ei edelleenk��n olla valmiita sellaisiin toimiin, joilla kokonaisenergian kulutus saadaan selv��n laskuun ja uusiutuvan energian ja sit� tukevan teknologian k�ytt� vahvaan nousuun.

U.B. Linstr&#65533;m kehitys- ja ymp&#65533;rist&#65533;kysymyksiin erikoistunen professorin
yleis&#65533;osastokirjoituslyhemnelm&#65533;.

101. Re: 2SC2509 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-06 19:44:14 UTC
From: Theo <theodore.twyler@ntlworld.com>
Message-ID: <oq0jl.7869$n_6.2251@newsfe22.ams2>
Source record: 3304

"Scott" <acepilotREMOVE@bloomer.net> wrote in message
news:RoednavOHpJC9RbUnZ2dnUVZ_vSdnZ2d@bright.net...
> Theo wrote:
>> Anyone out there know where I can buy a couple of 2SC2509 transistors?
>> Any help will be greatly appreciated.
>>
>> Theo
>
> It says "Call" for price and they have a $25 minimum order, but at least
> they might have them...
>
> http://www.rfparts.com/transistors_2SC.html#2458

Thanks Scott,
I have contacted RF Parts who inform me the transistor is now obsolete and
so is the equivalent.
Does anyone know what the equivalent is to the 2SC2509 so I can search for
that too?

102. Re: Cutting non ferrous metals with a table saw

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-06 19:56:37 UTC
From: JIMMIE <jimmie68@gmail.com>
Message-ID: <a583f333-5677-479d-8340-684ed8d6c8e2@w1g2000prm.googlegroups.com>
Source record: 3305

On Dec 19 2008, 12:14 pm, raypsi <RBorow...@gmail.com> wrote:
> On Dec 18, 9:23 pm, "Dale Parfitt" <pari...@verizon.net> wrote:
>
>
>
>
>
> > > >> Jimmie
>
> > > > Hey OM
>
> > > > did you looky at harbor freight tools?
>
> > > > I seen a twin blade circular saw $60 only
>
> > > > 73 OM
>
> > > > n8zu
>
> > > Commercially, we use a triple chip blade. The current blade is almost 10
> > > years old and leaves a mirror finish on the aluminum cut.
>
> > > Dale W4OP
>
> Hey OM
> If a twin blade 6.25 inch blade cuts like a 14 inch blade what's a
> triple blade cut like?
>
> And can you shave your face with that mirror?
> That would make one heck of a disco ceiling mirror ball.
>
> Twin blade is lifetime gaurantee.
>
> 73 OM
> n8zu- Hide quoted text -
>
> - Show quoted text -

For those still interested I found that Delta makes a non ferrous
blade that sells for about $25 USD.

Jimmie

103. Re: 2SC2509 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-06 21:00:31 UTC
From: dplatt@radagast.org
Message-ID: <f0lu56-rgc.ln1@radagast.org>
Source record: 3306

In article <oq0jl.7869$n_6.2251@newsfe22.ams2>,
Theo <theodore.twyler@ntlworld.com> wrote:

>Thanks Scott,
>I have contacted RF Parts who inform me the transistor is now obsolete and
>so is the equivalent.
>Does anyone know what the equivalent is to the 2SC2509 so I can search for
>that too?

It looks as if ECG236 is one possible substitute, and 2SC1945 is another. You might also check out 2SC1969 and MRF-485... depending on your application they might work. Kenwood apparently recommends the 2SC3133 as a substitute in the TS-450.

The lead configurations for these substitutes may be different and require lead-swapping, and other parts changes may be required when using substitute transistors.

Beware of possible fake/forged/counterfeit parts.

I believe I've seen some mod workups for CB rigs, which substitute an entirely different sort of part (e.g. the IRF510) as an RF driver or final. Using the IRF510 or similar MOSFETs as RF finals requires substantial circuit modification, and from what I've heard the efficiency is likely to be poor if you're driving them from a 12-volt supply.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

104. Re: Cutting non ferrous metals with a table saw

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-06 22:16:02 UTC
From: Tio Pedro <radioconnection@cox.net>
Message-ID: <NE2jl.449$AC1.378@newsfe24.iad>
Source record: 3307

"JIMMIE" <jimmie68@gmail.com> wrote in message news:a583f333-5677-479d > >
>> Jimmie
> For those still interested I found that Delta makes a non ferrous
blade that sells for about $25 USD.

Jimmie

Very interested. What size blade, and how does it cut aluminum?

Pete

105. Re: 2SC2509 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-06 23:11:32 UTC
From: Colin J Thomson <colin@gsixavk.demon.co.uk>
Message-ID: <gu3jl.26109$eY.21667@newsfe15.ams2>
Source record: 3308

Theo wrote:
>>> Anyone out there know where I can buy a couple of 2SC2509 transistors?
>>> Any help will be greatly appreciated.

Someone has a pair on Ebay # 270328247825

73 Colin - G6AVK

106. Re: 2SC2509 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-07 01:05:46 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <FfydnWu_XbT2QxHUnZ2dnUVZ_jWWnZ2d@bright.net>
Source record: 3309

Theo wrote:
> "Scott" <acepilotREMOVE@bloomer.net> wrote in message
> news:RoednavOHpJC9RbUnZ2dnUVZ_vSdnZ2d@bright.net...
>
>>Theo wrote:
>>
>>>Anyone out there know where I can buy a couple of 2SC2509 transistors?
>>>Any help will be greatly appreciated.
>>>
>>>Theo
>>
>>It says "Call" for price and they have a $25 minimum order, but at least
>>they might have them...
>>
>>http://www.rfparts.com/transistors_2SC.html#2458
>
>
> Thanks Scott,
> I have contacted RF Parts who inform me the transistor is now obsolete and
> so is the equivalent.
> Does anyone know what the equivalent is to the 2SC2509 so I can search for
> that too?
>
>
Crap. Sorry about that :(Is everything obsolete these days such that
nobody can build anything anymore? I was going to make another 222
transverter from W1GHZ, but the stupid helical filters aren't available
anymore (I think Digikey still has some but they want $48 each for a 222
three pole filter. That's nuts! So, I have a blank board and I'm
going to try to make a simple filter and see if I can make it
work...I've been "build crazy" for the past couple years and it's
getting harder and harder! You have to pretty much build something very
soon after it appears in a magazine or some part will go obsolete and
you're stuck...

Scott
N0EDV

107. Seeking New FAQ/Intro Maintainers for rec.radio.amateur.*

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-07 07:05:01 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/recruitment-1-1233990300@panix.com>
Source record: 3310
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/recruitment
Revision: 1.1 2007/09/29 18:42:47
Posting-Frequency: posted monthly
URL: http://www.faqs.org/faqs/radio/personal-intro/

Changes followed by "|".

The rec.radio.info newsgroup, first established in 1993, has been
recently revived by an active moderation team. We are currently seeking
suitable information, FAQ, and bulletin articles from the entire
rec.radio.* newsgroup hierarchy for simultaneous cross-posting to our
newsgroup.

We are seeking a replacement maintainer for the following information
bulletin formerly posted to rec.radio.amateur.* (and currently archived
at http://www.faqs.org/faqs/radio/personal-intro/ ):

radio/personal-intro
Subject: Guide to the rec.radio Newsgroups
Maintainer: jeffreyh@Hawaii.Edu (Jeffrey Herman)
Last Posted: 9 Nov 2001 06:18:17 GMT
Posting-Frequency: 15th of each month

We are willing to provide any technical support necessary to get this
article updated and automatically posted again at a regular interval.
This would include establishing contact with the original maintainer for
any necessary permissions. We would prefer to seek a new, dedicated
maintainer at this time, rather than start auto-posting the original
article ourselves.

For more information about our newsgroup, see:

http://www.panix.com/~rram/usenet/rri/index.html

Please direct any comments, questions, or criticisms to
rec-radio-info-request@panix.com.
```

108. Re: 2SC2509 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-07 07:28:25 UTC
From: geek <geek@localhost.localdomain>
Message-ID: <pan.2009.02.07.07.28.25.161100@localhost.localdomain>
Source record: 3311

On Fri, 06 Feb 2009 23:11:32 +0000, Colin J Thomson wrote:

> Theo wrote:
>>>> Anyone out there know where I can buy a couple of 2SC2509 transistors?
>>>> Any help will be greatly appreciated.
>
> Someone has a pair on Ebay # 270328247825
>
> 73 Colin - G6AVK

Look at his feedback before deciding to bid.

From my standpoint, he has stupidly excessive shipping for transistors.

109. Re: 2SC2509 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-07 11:37:57 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <590b54d4-e2b4-4857-beb7-903dca5822ac@t3g2000yqa.googlegroups.com>
Source record: 3312

On Feb 5, 3:12 pm, "Theo" <theodore.twy...@ntlworld.com> wrote:
> Anyone out there know where I can buy a couple of 2SC2509 transistors?
> Any help will be greatly appreciated.
>
> Theo

Hey OM

I'd use a 2SC1969, used almost in every common CB radio as a final.
I saw them here with no minimum order I can see:

http://tinyurl.com/b5gv7e

73 OM
de n8zu

110. Re: Battery matching solution?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-07 12:06:59 UTC
From: Highland Ham <rfburns@allbands.net>
Message-ID: <PbydnXn2a6745BDUnZ2dnUVZ8tninZ2d@pipex.net>
Source record: 3313

>> Nicad and NimH cells not regularly used can be best continously tickle
>> charged at 10 -40 mA depending on size/capacity.
>> Example : I have a Wahl cordless battery powered soldering iron 2.4 V (2
>> cells) which is continously trickle charged at 10 mA . When in use the
>> charge rate is switched to 300 mA.
>>
>> Frank KN6WH / GM0CSZ

> > I have one of those too. The originals were NiCad ? mAH, Then the 1.2 AH
> fast charge cells, but this last replacement bunch are NiMh 3 AH cells that
> I pulled out of a new Radio Shack race car battery. This has never gone
> dead on me even after sitting a month in the tool box. I have both the
> original charger and the Orange one that is just enough for a decent charge
> but has no idea when to shut off. NiMh don't mind being topped off, but
> don't like to be hit really hard like NiCads do.

The original charger inside the orange coloured stand is just a
transformer with an 'embedded' diode ,rather crude .
I have removed the transformer , fitted the stand on top of a small
plastic enclosure in which I have put a transformer with 12V output , a
rectifier and a LM317 with appropriate resistors and a switch for a
constant charging rate of 300 or 10 mA .

Frank GM0CSZ / KN6WH (back in GM land)

111. WTB: HC/6u sockets with xtal clips

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-07 17:50:10 UTC
From: Tio Pedro <radioconnection@cox.net>
Message-ID: <zRjjl.868$E67.827@newsfe12.iad>
Source record: 3314

Hi

I need some HC6/u ceramic xtal sockets and the
metal clips that hold the xtals (and ground them.)
I'd be happy just to find the CLIPS, as I do have
a resource for the sockets. Can anyone help
with clips (with or without sockets..)

Pete

112. Re: HC/6u sockets with xtal clips

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-07 18:52:52 UTC
From: Dale Parfitt <parinc1@verizon.net>
Message-ID: <8Mkjl.1577$N02.1459@nwrddc02.gnilink.net>
Source record: 3315

"Tio Pedro" <radioconnection@cox.net> wrote in message
news:zRjjl.868$E67.827@newsfe12.iad...
> Hi
>
> I need some HC6/u ceramic xtal sockets and the
> metal clips that hold the xtals (and ground them.)
> I'd be happy just to find the CLIPS, as I do have
> a resource for the sockets. Can anyone help
> with clips (with or without sockets..)
>
> Pete
Hi Pete,
You could easily make your own out of 1/4" strips of phosphor bronze- Small
Parts or K&S Engineering may carry the strips.

Dale

113. Re: Cutting non ferrous metals with a table saw

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-07 20:16:26 UTC
From: JIMMIE <jimmie68@gmail.com>
Message-ID: <581ea8ed-3c03-43e8-832a-f9697581d86d@m40g2000yqh.googlegroups.com>
Source record: 3316

On Feb 6, 5:16 pm, "Tio Pedro" <radioconnect...@cox.net> wrote:
> "JIMMIE" <jimmi...@gmail.com> wrote in message news:a583f333-5677-479d > >
>
> >> Jimmie
> > For those still interested I found that Delta makes a non ferrous
> blade that sells for about $25 USD.
>
> Jimmie
>
> Very interested. What size blade, and how does it cut aluminum?
>
> Pete

Blade is 10 inch, fits my chop saw , radial arm and table saw.
Ive used it to cut Al tubing and some square bar stock and it seemed
to do a good job.
I tried it on some Al sheet metal and it did pretty awful. I think
this has something to do with the alloy more than the blade. I have
always had trouble doing anything with this piece of stock. It binds
up drill bits in a second.

Jimmie

114. Re: 2SC2509 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-07 20:31:08 UTC
From: John <jrw>
Message-ID: <D-OdncE-EIahchDUnZ2dneKdnZydnZ2d@posted.plusnet>
Source record: 3317

HI

Also try http://www.jabdog.com/semi-tra6.htm for 2SC1969 while stocks last.
Sadly no 2SC2509s though.

Watch out though. Looking on http://www.modecomponents.co.uk/ under the
Transistors section it states:
Due To Mitsubishi discontinuing the below devices and so many
fakes on the market I am no longer stocking them. 2SC1969 is one of the
listed items.

73
John
--
www.wells10000.plus.com/m5aml

"raypsi" <RBorowiak@gmail.com> wrote in message
news:590b54d4-e2b4-4857-beb7-903dca5822ac@t3g2000yqa.googlegroups.com...
On Feb 5, 3:12 pm, "Theo" <theodore.twy...@ntlworld.com> wrote:
> Anyone out there know where I can buy a couple of 2SC2509 transistors?
> Any help will be greatly appreciated.
>
> Theo

Hey OM

I'd use a 2SC1969, used almost in every common CB radio as a final.
I saw them here with no minimum order I can see:

http://tinyurl.com/b5gv7e

73 OM
de n8zu

115. Re: testi-testi

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-08 14:25:37 UTC
From: Theo <theodore.twyler@ntlworld.com>
Message-ID: <KXBjl.5249$9u6.1095@newsfe27.ams2>
Source record: 3318
Cross-posted to: sfnet.harrastus.autot.maahantuonti,sfnet.harrastus.tanssi,sfnet.tori.myydaan.muut,rec.radio.amateur.homebrew

El frinder shetterlimpt den custe mied avserboln.

116. icom 765

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-09 12:25:20 UTC
From: totomarkoto <totomarkoto.3d6199a@radiobanter.com>
Message-ID: <totomarkoto.3d6199a@radiobanter.com>
Source record: 3319

Hai there..
i am new commer in this side, Is there any information about
transceiver icom 765, I would like to buy it if possible for me
ofcourse

--
totomarkoto

117. Re: icom 765

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-09 19:18:21 UTC
From: Highland Ham <rfburns@allbands.net>
Message-ID: <gv2dnXDyQYvjHA3UnZ2dnUVZ8uidnZ2d@pipex.net>
Source record: 3320

totomarkoto wrote:
> Hai there..
> i am new commer in this side, Is there any information about
> transceiver icom 765, I would like to buy it if possible for me
> ofcourse
=======
Suggest you go to www.mods.dk ; there you'll find the instruction manual for this transceiver; look for : manuals: Icom ---> 765

Frank GM0CSZ / KN6WH

118. Looking for voltmeter kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-13 00:19:39 UTC
From: Jean <ve2ghi@gmail.com>
Message-ID: <a16c7bca-6ca8-40dd-9804-eb7b45e74315@h5g2000yqh.googlegroups.com>
Source record: 3321

Hello all of you
I am in the process of completing the "power supply of my dream".
One of the problem i meet is the meetering.
I would like to use a digital voltmeter (those with red led). I
alwready use the LCD volmeter but i dont like them. They are way too
much sensitive to static, they dont really produce a bright display
and they dont seem to like to have volt on their input when they are
off.

Does anyone could point me to some kit for that purpose.
I have room on the face plate for two of them (5 cmx2cm)

I am not sure the second one for amp would be usefull. Amp change very
rapidly and maybe there is another way to measure them.

72/73 de Jean(VE2GHI)

119. Re: Looking for voltmeter kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-13 01:42:02 UTC
From: Dale Parfitt <parinc1@verizon.net>
Message-ID: <Kd4ll.398$ac6.193@nwrddc02.gnilink.net>
Source record: 3322

"Jean" <ve2ghi@gmail.com> wrote in message
news:a16c7bca-6ca8-40dd-9804-eb7b45e74315@h5g2000yqh.googlegroups.com...
> Hello all of you
> I am in the process of completing the "power supply of my dream".
> One of the problem i meet is the meetering.
> I would like to use a digital voltmeter (those with red led). I
> alwready use the LCD volmeter but i dont like them. They are way too
> much sensitive to static, they dont really produce a bright display
> and they dont seem to like to have volt on their input when they are
> off.
>
> Does anyone could point me to some kit for that purpose.
> I have room on the face plate for two of them (5 cmx2cm)
>
> I am not sure the second one for amp would be usefull. Amp change very
> rapidly and maybe there is another way to measure them.
>
> 72/73 de Jean(VE2GHI)

Marlin P Jones in N Palm FL has what you need.
mpja.com (?)

Dale W4OP

120. SolderSmoke Podcast

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-15 08:40:49 UTC
From: "bill.meara@gmail.com" <bill.meara@gmail.com>
Message-ID: <338ec41a-a924-4727-b08d-0e0581f27124@r41g2000yqm.googlegroups.com>
Source record: 3323
Cross-posted to: sci.electronics.basics,rec.radio.amateur.homebrew

http://www.soldersmoke.com

http://soldersmoke.blogspot.com

Superbowl Sunday in Rome. "Playing for Pizza." Spirals on the Piazza
Empire of the Air -- Gerbils Renamed
"Electrons on Parade" Good RCA film about tubes
Minimalist Mania:
ET-1/FETer transmitter built -- some problems
New Minimalist Yahoo group
AA1TJ and AA1MY make QRP History with tunnel diode rig
QRSS News:
New beacons and grabbers in US and Canada
K6HX and the lure of the whisperers
Upside down FSK for VK/ZL observers?
Chip extraction tips (belated)
What "s.o.t." means.
MAILBAG:
Brad WA5PSA still jogging in Tulsa
Ted AJ8T and Paul VK5PH: Lake not named for Lee
Neil G7AQK HB mystery box
Doug WB5TKI on how to extract chips
Ron AA5RS advises Billy to stick with Linux
Bill AA0RQ uses the hard stuff
Sott on Heaviside: Good guy or not?
Brent in Twin Cities: SWL Rockmite and SS lead to ham radio
Dan NM5DV building SDR QRSS rig
Jeff K07M listens while flying private plane
John W6TC has great article for Electronic Design
Edwin WA4YHL: Amateur Logic TV #23 is available
Dale WA5DJJ on the possible benefits of upside down FSK
Eddie G3JZO: Upside down FSK looks like laundry on the line!
Jerry NR5A has the minimalist bug

For the podcast go to:
http://www.soldersmoke.com

For the new SolderSmoke Store:
http://www.cafepress.com/SolderSmoke

121. Indcon

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-15 20:11:22 UTC
From: karthikvceg@gmail.com
Message-ID: <b13ecf87-5493-43f1-9867-a0f875a571af@g1g2000pra.googlegroups.com>
Source record: 3324

INDCON '09 March 12, 13 & 14

INDCON is flagship event of the Department of Industrial Engineering, Anna University, Chennai. Having its roots in the early 90's, INDCON has stood the test of time among the plethora of college symposiums. Among the usual events like paper presentations INDCON has always fostered innovation through events like PRODOMANIA, INNOVATE among others. This year it is being planned on a massive scale, with huge prize amount and a staggering number of events, the main focus being on having something for everyone who participates in the symposium. From the really technical events to the 'Letting your hair down' events like SHOWDOWN and events for the part-time students, we have made sure that no one is left out.

CONCLAVE – For the first time in INDIA a conclave of Industrial Engineers experts from all over the country will congregate at the IE CONCLAVE to share their thoughts on emerging IE trends. This event is expected to be a huge hit among the research scholars.

PRODAMANIA – Prodomania is design and present event which endeavors to challenge your designing skills to come up with new products /ideas and stimulates your creative ability in coming up with improvements for existing products.

INNOVATE – Combines 'Contraptions' with 'Rumble in the junk' will surely set the adrenaline pumping in the hearts of its participants and the viewers alike.

INDUSTRIAL STRATEGIST – For all you management geeks out there this is THE event to be in.
An interesting array of Quizzes are also being lined up and the word is going around that even die hard Quiz buffs are going to find these ones a hard nut to crack.

Check out www.indcon.ieceg.in for more details.

List of events :
- Prodomania
- IE Conclave
- Industrial Strategist
- Paper presentation
- Innovate
- Biz quiz
- Quality quiz
- Math quiz
- Black Box

122. HUGE lot 37+ old transistor radios-KOYO PARROT-SONY 3F-85WA, EXPO '70, many many more ! ALL FOR ONE PRICE !

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-17 15:29:27 UTC
From: radio shack <cheesegrater87@yahoo.com>
Message-ID: <43c67eed-1612-4ff6-94e1-0fbc2b8fb7ab@e18g2000yqo.googlegroups.com>
Source record: 3325

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&ssPageName=STRK:MESELX:IT&item=140300868459

123. Transmitter filter relay switching?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-17 16:25:16 UTC
From: "Ross, NS7F" <rjtucke@gmail.com>
Message-ID: <0e6dcccd-d955-4119-bfba-1de3d447bd49@s24g2000vbp.googlegroups.com>
Source record: 3326

This is with regards to a medium-power (~50W) CW transmitter that I am building for 40, 20, 15, & 10m. I would like to use relays to switch the output filters, but have no idea what kind of relay I will need. Dr Sabin mentioned that a high-quality relay is required (http://www.google.com/url?url=http://groups.google.com/g/d5a7ff03/t/3d5e036fddd024eb/d/355b6c8e64361096%3Fhl%3Den%26ie%3DUTF-8%26oe%3Dutf-8%26q%3Dsabin%2Brelay%2Bband%2Bfilter%23355b6c8e64361096&ei=u-SaSdCSGIOU-wGVlcGnBQ&sa=t&ct=res&cd=1&source=groups&usg=AFQjCNHG7VKozzInElLsIi0baYXpyphcAw) but I have been unable to find anything specific. Could anybody please direct me to a resource that would help me answer this question? Thank you very much.

For reference, the transmitter is a redesign of the classic '60s "inexpensive 75W transmitter", originally by Lew McCoy (I believe), one version of which can be found at (http://www.mines.uidaho.edu/~glowbugs/inexpensive75wattxmitter.pdf). It is a simple crystal-controlled 6AG7 followed by an 807 amplifier at 75W input (<50W output). The filters are from Ed Wetherhold's article- (available at http://www.arrl.org/tis/info/pdf/9902044.pdf) 7th order "Chebyshev With Added Zero" to give better second harmonic attenuation.

Best regards,
Ross, NS7F

124. Re: Looking for voltmeter kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-17 17:05:56 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <04ea6c5d-ad16-45b4-b5b1-357581a7c517@r41g2000yqm.googlegroups.com>
Source record: 3327

On Feb 12, 7:19 pm, Jean <ve2...@gmail.com> wrote:
> Hello all of you
> I am in the process of completing the "power supply of my dream".
> One of the problem i meet is the meetering.
> I would like to use a digital voltmeter (those with red led). I
> alwready use the LCD volmeter but i dont like them. They are way too
> much sensitive to static, they dont really produce a bright display
> and they dont seem to like to have volt on their input when they are
> off.

LCD displays may be more viewable than LED in sunlight.

LCD displays are available with backlights for use in dim
environments.

There are both LCD and LED panel meters available but they use very
similar chipsets so I'm not sure "too much sensitive to static" would
be true for one but not the other.

> Does anyone could point me to some kit for that purpose.
> I have room on the face plate for two of them (5 cmx2cm)

Go to Digikey and search for "LED panel meter".

> I am not sure the second one for amp would be usefull. Amp change very
> rapidly and maybe there is another way to measure them.

For rapidly varying quantities nothing beats a good old analog meter.

For slowly changing quantities you need to know to 4 decimal places
nothing beats a digital meter.

Sometimes digital meters are supplemented with a bargraph type display
to show rapid changes graphically.

Tim N3QE

125. Re: Transmitter filter relay switching?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-18 02:20:32 UTC
From: JIMMIE <jimmie68@gmail.com>
Message-ID: <e944509a-baaa-4e09-97cc-afdcd4217ab3@v19g2000yqn.googlegroups.com>
Source record: 3328

On Feb 17, 11:25 am, "Ross, NS7F" <rjtu...@gmail.com> wrote:
> This is with regards to a medium-power (~50W) CW transmitter that I am
> building for 40, 20, 15, & 10m. I would like to use relays to switch
> the output filters, but have no idea what kind of relay I will need.
> Dr Sabin mentioned that a high-quality relay is required
(http://www.google.com/url?url=http://groups.google.com/g/d5a7ff03/t/3d5e036f...
>) but I have been unable to find anything specific. Could anybody
> please direct me to a resource that would help me answer this
> question? Thank you very much.
>
> For reference, the transmitter is a redesign of the classic '60s
> "inexpensive 75W transmitter", originally by Lew McCoy (I believe),
> one version of which can be found at (http://www.mines.uidaho.edu/
> ~glowbugs/inexpensive75wattxmitter.pdf). It is a simple crystal-
> controlled 6AG7 followed by an 807 amplifier at 75W input (<50W
> output). The filters are from Ed Wetherhold's article- (available
athttp://www.arrl.org/tis/info/pdf/9902044.pdf) 7th order "Chebyshev
> With Added Zero" to give better second harmonic attenuation.
>
> Best regards,
> Ross, NS7F

My friend used to do something similar at the antenna and using SPST
contacotrs that were used to switch an air conditioner compressor on
and off. Three of these could easily fit under a Pi-net coil. Ill try
to find picks and part numbers.

Jimmie

126. AC/DC radio filter cap source?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-18 18:59:18 UTC
From: Henry Kolesnik <kolesnik@nojunksbcglobal.net>
Message-ID: <TOYml.13183$D32.1320@flpi146.ffdc.sbc.com>
Source record: 3329

What's a good place to get some good ones, reasonable? I've got
several AA5 radios with hum and need to fix them. All my new old stock
capacitors are dry.
thanks
Hank wd5jfr

127. Re: AC/DC radio filter cap source?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-18 19:39:30 UTC
From: JIMMIE <jimmie68@gmail.com>
Message-ID: <12401983-61e0-493d-a4c8-fb428876f75c@j8g2000yql.googlegroups.com>
Source record: 3330

On Feb 18, 1:59 pm, "Henry Kolesnik" <koles...@nojunksbcglobal.net>
wrote:
> What's a good place to get some good ones, reasonable? I've got
> several AA5 radios with hum and need to fix them. All my new old stock
> capacitors are dry.
> thanks
> Hank wd5jfr

Finding the multi- section caps may be impossible. A local parts
dealer had some long skinny caps I bundled 3 of them together with
heat shrink for a replacement.
They were at Slayton's in Charlotte NC. Parts like that come and go
there and they often dont know what they have unless its regular
stock. Its a great place to browse on Saturday mornings.

Jimmie

128. Re: AC/DC radio filter cap source?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-18 19:50:01 UTC
From: JB <nospam@goofball.net>
Message-ID: <JDZml.163$tw4.97@nwrddc01.gnilink.net>
Source record: 3331

"Henry Kolesnik" <kolesnik@nojunksbcglobal.net> wrote in message
news:TOYml.13183$D32.1320@flpi146.ffdc.sbc.com...
> What's a good place to get some good ones, reasonable? I've got
> several AA5 radios with hum and need to fix them. All my new old stock
> capacitors are dry.
> thanks
> Hank wd5jfr

Buy new ones. Small, fresh axial and pc mount 160 to 450v. I was surprised
how much smaller than the originals.

http://www.nteinc.com/

129. Re: AC/DC radio filter cap source?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-18 20:17:14 UTC
From: Tio Pedro <radioconnection@cox.net>
Message-ID: <l1_ml.13422$cl2.3581@newsfe09.iad>
Source record: 3332

"Henry Kolesnik" <kolesnik@nojunksbcglobal.net> wrote in message
news:TOYml.13183$D32.1320@flpi146.ffdc.sbc.com...
> What's a good place to get some good ones, reasonable? I've got
> several AA5 radios with hum and need to fix them. All my new old stock
> capacitors are dry.
> thanks
> Hank wd5jfr
>

Hank

Check www.dialcover.com. Bill Turner makes look-alike
replacements in several values. They are good if you want
to keep the underchassis appearances. Otherwise, use
discrete axials.

Pete

130. Re: AC/DC radio filter cap source?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-18 20:18:01 UTC
From: Tio Pedro <radioconnection@cox.net>
Message-ID: <42_ml.13423$cl2.4642@newsfe09.iad>
Source record: 3333

http://www.dialcover.com/capacitors2.html

more to the point....

131. Norcal FCC-2 DDS kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-18 20:22:21 UTC
From: "Joe L." <invalid@falseddress2004.net>
Message-ID: <invalid-5B5802.14220618022009@free.teranews.com>
Source record: 3334

Has anyone here ever built a RX or TX using the Norcal FCC-2 DDS kit?
I've just finished building the kit and it worked on the first try. I'm
planning to use it as the LO for a multi-band version of the KK7B R1
direct conversion receiver, then will probably add TX to it later. Just
wondering if anyone had any experiences with this kit that they'd like
to discuss. I'll post my findings here in the coming days or weeks.

Norcal did a nice job putting together the FCC-1 frequency counter kit
and FCC-2 DDS kit. Thanks Norcal!

73,
Joe K9LY

132. Re: AC/DC radio filter cap source?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-19 00:39:34 UTC
From: Highland Ham <rfburns@allbands.net>
Message-ID: <fKmdnTrq4qzVNwHUnZ2dnUVZ8u6dnZ2d@pipex.net>
Source record: 3335

Henry Kolesnik wrote:
> What's a good place to get some good ones, reasonable? I've got
> several AA5 radios with hum and need to fix them. All my new old stock
> capacitors are dry.
> thanks
> Hank wd5jfr
>
==========
Suggest you look for good electrolytic caps in scrap (not too old) PC SMPS units . I have removed quite a few of adequate capacitance and working voltage to be used in valve (tube) type radio ,assuming AA5 radios are of the tube variety.
When removed from scrap equipment , it is best to slowly cycle them (charge/discharge) a few times up to the stated working voltage .
If necessary test them in a real equivalent circuit and check ripple with a scope . A bit of work ,but imho a rewarding activity.

Frank GM0CSZ / KN6WH

133. 2m Bandpass Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-19 09:38:33 UTC
From: tomcorker@googlemail.com
Message-ID: <e779fe3d-653f-4b3f-af66-4b9f50a1a8d9@v39g2000yqm.googlegroups.com>
Source record: 3336

I recently acquired one of these cheap 2m handhelds from China, an FDC-150 I think. It's great for the price (£30) apart from a problem with QRM.

I use the radio with a 3 element beam from SOTA activations from hill tops. It varies from location to location, but I often get strong intermodulation effects (caused by pagers I think). I suspect the radio, being wide band 136-174MHz, has insufficient filtering to reject these strong signals.

The intermod is a real problem, as I am often unable to hear stations, or only get half of what they are saying before they are wiped out. I was wondering about building a 2m bandpass filter like the one at http://www.arrl.org/tis/info/pdf/0005054.pdf

Does this look like a good bet?
Also any ideas where I can get the semi-rigid coax (UT-141 or RG-402) in the UK?

134. Re: 2m Bandpass Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-19 11:09:47 UTC
From: stev eh <stevejhasdghsjhsdghjdghdghghghdhghgdgdhsgdsgdsgGDJHGJHSJHDGSJHGDJHGDJHGJH@TFIF.CO.UK>
Message-ID: <499d3df8$1_2@mk-nntp-2.news.uk.tiscali.com>
Source record: 3337

tomcorker@googlemail.com wrote:
> I recently acquired one of these cheap 2m handhelds from China, an
> FDC-150 I think. It's great for the price (ï¿½30) apart from a problem
> with QRM.
>
> I use the radio with a 3 element beam from SOTA activations from hill
> tops. It varies from location to location, but I often get strong
> intermodulation effects (caused by pagers I think). I suspect the
> radio, being wide band 136-174MHz, has insufficient filtering to
> reject these strong signals.
>
> The intermod is a real problem, as I am often unable to hear stations,
> or only get half of what they are saying before they are wiped out. I
> was wondering about building a 2m bandpass filter like the one at
> http://www.arrl.org/tis/info/pdf/0005054.pdf
>
> Does this look like a good bet?
> Also any ideas where I can get the semi-rigid coax (UT-141 or RG-402)
> in the UK?
Try Westlake, if they don't have it they may point you in the right
direction.
http://whwestlake.110mb.com/

A simple helical filter as fitted to some of the early Japanese ham band
only sets may be a bit more compact and still have enough rejection of
out of band signals as most of the pagers in the UK are around 153 MHz.
I use one scavenged from a scrap Icom IC22 but most of the radios from
that era used them.

Steve H

135. Re: 2m Bandpass Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-19 19:52:02 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <f699ac59-84c5-41b3-9306-dc826d043106@p23g2000prp.googlegroups.com>
Source record: 3338

On Feb 19, 1:38 am, tomcor...@googlemail.com wrote:
> I recently acquired one of these cheap 2m handhelds from China, an
> FDC-150 I think. It's great for the price (£30) apart from a problem
> with QRM.
>
> I use the radio with a 3 element beam from SOTA activations from hill
> tops. It varies from location to location, but I often get strong
> intermodulation effects (caused by pagers I think). I suspect the
> radio, being wide band 136-174MHz, has insufficient filtering to
> reject these strong signals.
>
> The intermod is a real problem, as I am often unable to hear stations,
> or only get half of what they are saying before they are wiped out. I
> was wondering about building a 2m bandpass filter like the one
athttp://www.arrl.org/tis/info/pdf/0005054.pdf
>
> Does this look like a good bet?
> Also any ideas where I can get the semi-rigid coax (UT-141 or RG-402)
> in the UK?

This kinda agrees with what Steve posted...

First, if you want to build it, there's no reason you have to use semi-rigid. It should work fine with any reasonably low loss coax if you adjust for velocity factor variations from the design-specified coax.

But...if you have a way to tune an LC filter, you can make a more compact filter using coils and either explicit capacitors or the distributed capacitance as in a helical resonator. Using RG-59 size coax at 150MHz, you'll get resonators with an unloaded Q about 100 -- and it takes a piece of line about 40 cm long to do it. You can get well over twice the unloaded Q from a coil only about 6mm diameter and 6mm long. Higher unloaded Q allows you to build sharper filters and/or filters with lower insertion loss. Coaxial stub filters make sense--a lot of sense--at GHz and higher frequencies, but unless you want to use really large diameter resonators for something like a repeater duplexer that requires seriously high Qu, you're probably better off with an LC filter at 150MHz. If you don't have access to equipment to tune up a home-brew filter, use of a pre-tuned filter like the helical resonator Steve suggested is a good idea.

Cheers,
Tom

136. Re: 2m Bandpass Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-19 19:52:45 UTC
From: Chris Jones <lugnut808@yahoo.com>
Message-ID: <XLinl.7814$FN7.1847@newsfe04.ams2>
Source record: 3339

tomcorker@googlemail.com wrote:

> I recently acquired one of these cheap 2m handhelds from China, an
> FDC-150 I think. It's great for the price (£30) apart from a problem
> with QRM.
>
> I use the radio with a 3 element beam from SOTA activations from hill
> tops. It varies from location to location, but I often get strong
> intermodulation effects (caused by pagers I think). I suspect the
> radio, being wide band 136-174MHz, has insufficient filtering to
> reject these strong signals.
>
> The intermod is a real problem, as I am often unable to hear stations,
> or only get half of what they are saying before they are wiped out. I
> was wondering about building a 2m bandpass filter like the one at
> http://www.arrl.org/tis/info/pdf/0005054.pdf
>
> Does this look like a good bet?
> Also any ideas where I can get the semi-rigid coax (UT-141 or RG-402)
> in the UK?

Farnell and RS if you only want a short length, or FC Lane if you want more,
but they are more used to dealing with business customers.

Chris

137. FA: Omega Noise Bridge - - Eldico Antennascope

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-19 21:18:23 UTC
From: Norm VE3CZI <ve3czi@arrl.net>
Message-ID: <C0knl.16867$D9.9268@read2.cgocable.net>
Source record: 3340
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.swap

Omega Noise Bridge
http://cgi.ebay.ca/ws/eBayISAPI.dll?ViewItem&ssPageName=STRK:MESELX:IT&item=320341958440

Eldico Antique Antennascope
http://cgi.ebay.ca/ANTENNASCOPE-MODEL-AT-1-MFR-Eldico_W0QQitemZ320342097215QQcmdZViewItemQQptZVintage_Electronics_R2?hash=item320342097215&_trksid=p3911.c0.m14&_trkparms=72%3A1215%7C66%3A2%7C65%3A12%7C39%3A1%7C240%3A1318

Tnx for looking....Norm VE3CZI

138. Re: 2m Bandpass Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-19 23:43:04 UTC
From: JIMMIE <jimmie68@gmail.com>
Message-ID: <850bef7a-e7b6-4671-9a72-cc90e7c63caf@o11g2000yql.googlegroups.com>
Source record: 3341

On Feb 19, 4:38 am, tomcor...@googlemail.com wrote:
> I recently acquired one of these cheap 2m handhelds from China, an
> FDC-150 I think. It's great for the price (£30) apart from a problem
> with QRM.
>
> I use the radio with a 3 element beam from SOTA activations from hill
> tops. It varies from location to location, but I often get strong
> intermodulation effects (caused by pagers I think). I suspect the
> radio, being wide band 136-174MHz, has insufficient filtering to
> reject these strong signals.
>
> The intermod is a real problem, as I am often unable to hear stations,
> or only get half of what they are saying before they are wiped out. I
> was wondering about building a 2m bandpass filter like the one
athttp://www.arrl.org/tis/info/pdf/0005054.pdf
>
> Does this look like a good bet?
> Also any ideas where I can get the semi-rigid coax (UT-141 or RG-402)
> in the UK?

If you are right about it being from a paging system the problem may
have nothing to do with the quality of radio you have. I have
experienced the same thing with a cavity filter on the front end of a
rx. Often the problem is with the pager transmiter. In that case no
amount of filtering will help.

Jimmie

139. Re: Looking for voltmeter kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-20 01:28:17 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <fa045f76-a2f4-4956-8ab3-86a9c2f9e118@a12g2000yqm.googlegroups.com>
Source record: 3342

On Feb 12, 7:19 pm, Jean <ve2...@gmail.com> wrote:
> Hello all of you
> I am in the process of completing the "power supply of my dream".
> One of the problem i meet is the meetering.
> I would like to use a digital voltmeter (those with red led). I
> alwready use the LCD volmeter but i dont like them. They are way too
> much sensitive to static,

Hey OM
I don't think it's all about static per say. But the high input impedance you have to worry about I seen those things going up to 200 meg input, just looking at it would change the potential across a 200 meg input.
There's other cons about LCD like if it gets cold forget it, those liquid crystals just don't want to do their thing, when exposed to the energizing electric field at low temps. Sure you can get back lite LCD's but what happens when the back lite burns out?
I like LED displays but even then you are going to want to swamp down the meter input with like 1000 ohms.

73 OM
de n8zu

140. Re: 2m Bandpass Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-20 01:40:51 UTC
From: JB <nospam@goofball.net>
Message-ID: <DSnnl.470$tw4.380@nwrddc01.gnilink.net>
Source record: 3343

"JIMMIE" <jimmie68@gmail.com> wrote in message
news:850bef7a-e7b6-4671-9a72-cc90e7c63caf@o11g2000yql.googlegroups.com...
On Feb 19, 4:38 am, tomcor...@googlemail.com wrote:
> I recently acquired one of these cheap 2m handhelds from China, an
> FDC-150 I think. It's great for the price (ï¿½30) apart from a problem
> with QRM.
>
> I use the radio with a 3 element beam from SOTA activations from hill
> tops. It varies from location to location, but I often get strong
> intermodulation effects (caused by pagers I think). I suspect the
> radio, being wide band 136-174MHz, has insufficient filtering to
> reject these strong signals.
>
> The intermod is a real problem, as I am often unable to hear stations,
> or only get half of what they are saying before they are wiped out. I
> was wondering about building a 2m bandpass filter like the one
athttp://www.arrl.org/tis/info/pdf/0005054.pdf
>
> Does this look like a good bet?
> Also any ideas where I can get the semi-rigid coax (UT-141 or RG-402)
> in the UK?

>>If you are right about it being from a paging system the problem may
have nothing to do with the quality of radio you have. I have
experienced the same thing with a cavity filter on the front end of a
rx. Often the problem is with the pager transmiter. In that case no
amount of filtering will help.

>>Jimmie

Sad but true. A cavity the size of a backpack might only give you 30db of
rejection, but you might need more than 60db of rejection and you could
never get that without putting the radio in a sealed di-cast box with
bypassed power and audio. It would certainly be better though to start with
a RX module with some isolation. The fact is, that scanners and cheap HT's
might be rated at -40 db to -60 db of alternate channel rejection and get
blasted by everything on the mountain as well as everything on every other
mountain within 20 miles too! This is only a published spec. and doesn't
really tell you how much actual signal will result in overload of your RX
deck to cause Desense, nor does it guarantee that something else won't cause
a mix that falls right on the frequency you want to hear!

Or you could start with a top notch commercial RX deck with -90 db or better
and hope you can work on that.

If your problem is -only- paging TX, say 1000 WERP or +60dbm and you can stand right under the tower (for maximum vertical separation) you might have at least reduced the energy at your antenna to 0 dbm but more likely +20 dbm. Now you will have to notch out the offender by 140 db more to render it truly invisible. Rotsa ruck, but if you had a radio with a 5 pole helical resonator and Hi level mixer, you would be certainly better than with a scanner, which would be like sending a baby in to fight the fires in the Twin Towers.

141. Re: 2m Bandpass Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-20 02:02:30 UTC
From: Tio Pedro <radioconnection@cox.net>
Message-ID: <3bonl.35433$qt3.917@newsfe10.iad>
Source record: 3344

"JB" <nospam@goofball.net> wrote in message
news:DSnnl.470$tw4.380@nwrddc01.gnilink.net...
>
> "JIMMIE" <jimmie68@gmail.com> wrote in message
> news:850bef7a-e7b6-4671-9a72-cc90e7c63caf@o11g2000yql.googlegroups.com...
> On Feb 19, 4:38 am, tomcor...@googlemail.com wrote:
>> I recently acquired one of these cheap 2m handhelds from China, an
>> FDC-150 I think. It's great for the price (�30) apart from a problem
>> with QRM.
>>
>> I use the radio with a 3 element beam from SOTA activations from hill
>> tops. It varies from location to location, but I often get strong
>> intermodulation effects (caused by pagers I think). I suspect the
>> radio, being wide band 136-174MHz, has insufficient filtering to
>> reject these strong signals.
>>
>> The intermod is a real problem, as I am often unable to hear stations,
>> or only get half of what they are saying before they are wiped out. I
>> was wondering about building a 2m bandpass filter like the one
> athttp://www.arrl.org/tis/info/pdf/0005054.pdf
>>
>> Does this look like a good bet?
>> Also any ideas where I can get the semi-rigid coax (UT-141 or RG-402)
>> in the UK?
>
>>>If you are right about it being from a paging system the problem may
> have nothing to do with the quality of radio you have. I have
> experienced the same thing with a cavity filter on the front end of a
> rx. Often the problem is with the pager transmiter. In that case no
> amount of filtering will help.
>
>>>Jimmie
>
> Sad but true. A cavity the size of a backpack might only give you 30db of
> rejection, but you might need more than 60db of rejection and you could
> never get that without putting the radio in a sealed di-cast box with
> bypassed power and audio. It would certainly be better though to start
> with
> a RX module with some isolation. The fact is, that scanners and cheap
> HT's
> might be rated at -40 db to -60 db of alternate channel rejection and get
> blasted by everything on the mountain as well as everything on every other
> mountain within 20 miles too! This is only a published spec. and doesn't

> really tell you how much actual signal will result in overload of your RX
> deck to cause Desense, nor does it guarantee that something else won't
> cause
> a mix that falls right on the frequency you want to hear!
>
> Or you could start with a top notch commercial RX deck with -90 db or
> better
> and hope you can work on that.
>
> If your problem is -only- paging TX, say 1000 WERP or +60dbm and you can
> stand right under the tower (for maximum vertical separation) you might
> have
> at least reduced the energy at your antenna to 0 dbm but more likely +20
> dbm. Now you will have to notch out the offender by 140 db more to render
> it truly invisible. Rotsa ruck, but if you had a radio with a 5 pole
> helical resonator and Hi level mixer, you would be certainly better than
> with a scanner, which would be like sending a baby in to fight the fires
> in
> the Twin Towers.
>
If the interference is the result of a third order IMD product,
each 3 dB of rejection will yield a 9 dB improvement in the
third order intercept point.

A modest filter might yield surprising results, it isn't a linear
relationship.

Pete k1zjh

142. Re: AC/DC radio filter cap source?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-20 02:54:02 UTC
From: PhattyMo <phattymo@not.net>
Message-ID: <499e1b39$0$89386$815e3792@news.qwest.net>
Source record: 3345

Henry Kolesnik wrote:
> What's a good place to get some good ones, reasonable? I've got
> several AA5 radios with hum and need to fix them. All my new old stock
> capacitors are dry.
> thanks
> Hank wd5jfr
>

There's places like
www.triodeelectronics.com
www.tubesandmore.com

143. Re: 2m Bandpass Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-20 08:56:21 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <Uig$wxI1AnnJFAnc@ifwtech.co.uk>
Source record: 3346

tomcorker@googlemail.com wrote:
>I recently acquired one of these cheap 2m handhelds from China, an
>FDC-150 I think. It's great for the price (ï¿½30) apart from a problem
>with QRM.
>
>I use the radio with a 3 element beam from SOTA activations from hill
>tops. It varies from location to location, but I often get strong
>intermodulation effects (caused by pagers I think). I suspect the
>radio, being wide band 136-174MHz, has insufficient filtering to
>reject these strong signals.
>
>The intermod is a real problem, as I am often unable to hear stations,
>or only get half of what they are saying before they are wiped out. I
>was wondering about building a 2m bandpass filter like the one at
>http://www.arrl.org/tis/info/pdf/0005054.pdf
>
>Does this look like a good bet?
>Also any ideas where I can get the semi-rigid coax (UT-141 or RG-402)
>in the UK?

Might have just what you need... it's somewhere in the back of the
mind...

Some years ago John Regnault G4SWX was experimenting with various kinds
of filters using coaxial stubs. Many of the most useful ones were
published in Radcom and found their way onto my 'In Practice' website:

http://tinyurl.com/g4swxfilters

One of John's ideas was a filter with notches just above and below the
2m band, specifically to knock down the strong carriers from pagers. It
only needs two pieces of coax and two small trimmers.

The idea starts with an open-circuit quarter wave stub which is produces
a notch on the pager frequency, above or below the 2m band. To make it
field tunable, the stub is cut a little short and a small trimmer
inserted in series with the hot end. The only problem is that such a
stub will produce a mismatch at 145MHz: a stub that is resonant above
the band will appear capacitive at 145MHz, while a stub resonant below
the band will appear inductive.

These reactances can be compensated by a shunt inductor or capacitor,
but G4SWX's bright idea was always to use *both* stubs - regardless of
where the pagers are - and let them compensate each other.

Some work with an optimizer was needed to produce the best design, which proved to be quite tolerant of practical variations. We had an article almost ready for publication since 2002, but didn't go ahead because it seemed like "a solution waiting for a problem" - until this week.

A copy has been e-mailed to the OP, and if it works for him we will publish it.

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

144. Re: 2m Bandpass Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-20 11:40:21 UTC
From: Highland Ham <rfburns@allbands.net>
Message-ID: <EvednX1S8Y07CwPUnZ2dnUVZ8v-WnZ2d@pipex.net>
Source record: 3347

Ian White GM3SEK wrote:

> snip

> Some years ago John Regnault G4SWX was experimenting with various kinds
> of filters using coaxial stubs. Many of the most useful ones were
> published in Radcom and found their way onto my 'In Practice' website:
>
> http://tinyurl.com/g4swxfilters
>
> One of John's ideas was a filter with notches just above and below the
> 2m band, specifically to knock down the strong carriers from pagers. It
> only needs two pieces of coax and two small trimmers.
>
> The idea starts with an open-circuit quarter wave stub which is produces
> a notch on the pager frequency, above or below the 2m band. To make it
> field tunable, the stub is cut a little short and a small trimmer
> inserted in series with the hot end. The only problem is that such a
> stub will produce a mismatch at 145MHz: a stub that is resonant above
> the band will appear capacitive at 145MHz, while a stub resonant below
> the band will appear inductive.
>
> These reactances can be compensated by a shunt inductor or capacitor,
> but G4SWX's bright idea was always to use *both* stubs - regardless of
> where the pagers are - and let them compensate each other.

==========

Tnx Ian for the very useful info.

Frank GM0CSZ / KN6WH

145. Re: 2m Bandpass Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-20 11:53:24 UTC
From: tomcorker@googlemail.com
Message-ID: <b5273617-3b46-42fa-a765-93021b8c8392@f20g2000yqg.googlegroups.com>
Source record: 3348

On Feb 20, 8:56 am, Ian White GM3SEK <gm3...@ifwtech.co.uk> wrote:

>
> Might have just what you need... it's somewhere in the back of the
> mind...
>
> Some years ago John Regnault G4SWX was experimenting with various kinds
> of filters using coaxial stubs. Many of the most useful ones were
> published in Radcom and found their way onto my 'In Practice' website:
>
> http://tinyurl.com/g4swxfilters
>
> One of John's ideas was a filter with notches just above and below the
> 2m band, specifically to knock down the strong carriers from pagers. It
> only needs two pieces of coax and two small trimmers.
>
> The idea starts with an open-circuit quarter wave stub which is produces
> a notch on the pager frequency, above or below the 2m band. To make it
> field tunable, the stub is cut a little short and a small trimmer
> inserted in series with the hot end. The only problem is that such a
> stub will produce a mismatch at 145MHz: a stub that is resonant above
> the band will appear capacitive at 145MHz, while a stub resonant below
> the band will appear inductive.
>
> These reactances can be compensated by a shunt inductor or capacitor,
> but G4SWX's bright idea was always to use *both* stubs - regardless of
> where the pagers are - and let them compensate each other.
>
> Some work with an optimizer was needed to produce the best design, which
> proved to be quite tolerant of practical variations. We had an article
> almost ready for publication since 2002, but didn't go ahead because it
> seemed like "a solution waiting for a problem" - until this week.
>
> A copy has been e-mailed to the OP, and if it works for him we will
> publish it.
>
> --
>
> 73 from Ian GM3SEK   'In Practice' columnist for RadCom
(RSGB)http://www.ifwtech.co.uk/g3sek

Thanks for the advice everyone has given.

I've decided to give Ian's solution a try when I get the relevant
lengths of coax and trimmers in a week or so.

I'll report back when I've built it.

73s de 2E0WNT

146. Re: AC/DC radio filter cap source?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-20 14:30:44 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <0a1bc2ac-97e0-487c-9ba4-da3596ae9b87@c12g2000yqj.googlegroups.com>
Source record: 3349

On Feb 18, 1:59 pm, "Henry Kolesnik" <koles...@nojunksbcglobal.net>
wrote:
> What's a good place to get some good ones, reasonable? I've got
> several AA5 radios with hum and need to fix them. All my new old stock
> capacitors are dry.
> thanks
> Hank wd5jfr

Hey OM.
I used to make a living selling Mallory capacitors. Mallory came out
with a book called the Bird's and Bee's of electrolytic capacitors.
Well the electrolyte in these capacitors does dry out, but not from
sitting around in room temps. The electrolyte dries up from discharge
and charge, each time of a charge or discharge cycle the electrolyte
breaks down, into gas, that's why they have to be vented, or they
would explode. The electrolyte also dries up if you heat them up. In
the old days they used a lot of electrolyte.

So why don't they have capacity? The electrolyte in old style
capacitors has lots of room in between the plates and seperators, and
with time the electrolyte settles via gravity, At this point the
plates are no longer fully covered with electrolyte so the capacity
goes down the crapper.

>When removed from scrap equipment , it is best to slowly cycle them
>(charge/discharge) a few times up to the stated working voltage .
>If necessary test them in a real equivalent circuit and check ripple
>with a scope . A bit of work ,but imho a rewarding activity.

>Frank GM0CSZ / KN6WH

^Is right for the most part, the key really is to ramp the voltage.
from 0 to full rated WVDC, up slowly, real real real slow, like days
to a week, this will wick the electrolyte back up on the plates and
once again the capacitor will be usable. So a NOS capacitor off the
self at room temp can be brought back from the grave

73 OM
de n8zu

147. Re: 2m Bandpass Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-20 17:22:48 UTC
From: JB <nospam@goofball.net>
Message-ID: <IFBnl.574$tw4.235@nwrddc01.gnilink.net>
Source record: 3350

> If the interference is the result of a third order IMD product,
> each 3 dB of rejection will yield a 9 dB improvement in the
> third order intercept point.
>
> A modest filter might yield surprising results, it isn't a linear
> relationship.
>
> Pete k1zjh

"Surprising results" in a lab maybe. Still far short of real. An attenuator would tell you how much you really need. I used to use an HT with a dummy load instead of an antenna from Mt. Wilson to be able to talk into a box on Santiago Pk. Otherwise the HT couldn't even hear 500 WERP on-channel from the tower I could see with my own eyes. Be aware that you might only have 30 to 60 db of bolt on attenuation before case or cable leakage takes over.

I used an Alinco 2m HT with a two section helical resonator outboard (most portable solution). There was 3 db of insertion loss and 20 db of rejection outside of a 3 Mhz window. This was a packet radio and resulted in a 10db improvement in performance on-channel, but this was a home station on a 6db stick 20 ft in the air. Would have been far short on a mountain though. I aslo used that combination for T-Hunting in addition to a fixed 60db pad and a switched 20/20/10db pad with double shielded coax and 4 el. Quad. My best solutions was to find places to listen from that were shielded from the major mountain tops.

148. Re: 2m Bandpass Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-20 19:18:37 UTC
From: dplatt@radagast.org
Message-ID: <d9c376-2mn.ln1@radagast.org>
Source record: 3251

In article <3bonl.35433$qt3.917@newsfe10.iad>,
Tio Pedro <radioconnection@cox.net> wrote:

>If the interference is the result of a third order IMD product,
>each 3 dB of rejection will yield a 9 dB improvement in the
>third order intercept point.
>
>A modest filter might yield surprising results, it isn't a linear
>relationship.

For what it's worth: I used to have terrible pager-intermod problems with my Yaesu VX-5, when used with any reasonably-efficent antenna (e.g. J-pole)... pager-transmitter intermod drove it wild. This seems to be a common problem with most current-generation HTs, with their wide-open "DC to daylight" front ends whose high sensitivity (for use with lossy rubber-duck antennas) leaves them prone to being badly blasted by strong signals.

The solution I settled upon was the PAR Electronics VHFTN152-158, a notch filter specifically tuned to eliminate the VHF paging band, while passing other signals. PAR claims a notch depth of 50 dB (typical) at pager frequencies, with low loss at 2M and 440 frequencies. From the look of the filter, I believe it's probably a set of three helical resonators shunted across the line.

Problem solved - the VX-5 suffers no pager intermod at all that I can hear.

The same filter did *not* help, though, in curing a desense problem with our repeater's remote-link receiver, which was being blasted by a newly-installed paging system located in the same building. The pager was operating up in the mid-160MHz range, outside of the PAR filter's notch. We installed a DCI cavity-bandpass filter and the problem went away.

In re the OP's problem - I wonder whether it might be possible to home-brew a moderate-Q helical filter to serve as a notch? The old ARRL VHF handbook has some diagrams of this sort of thing. As Tio points out, one might not need all that deep a notch to result in an acceptable reduction in intermodulation and desense.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

149. WIA 'Amateur Radio' 10m FM Tcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-21 20:29:16 UTC
From: John <jrw>
Message-ID: <882dnVdFLMcf_j3UnZ2dnUVZ8uGdnZ2d@posted.plusnet>
Source record: 3252

Hello folks,

I read with interest on this web page
http://blog.marxy.org/2009/01/amazing-transmitter-that-uses-atmega16.html
about an
article in WIA's Amateur Radio featuring a 10m FM transceiver design using
an AD9851 and an ATmega16. Does anyone have a copy of this article (and
the
software to go on the chips) so I could have a look at it please?

73

John

--
www.wells10000.plus.com/m5aml
--

150. Re: Transmitter filter relay switching?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-21 20:38:01 UTC
From: No Spam <nospam@nospam.com>
Message-ID: <gnpon8$b1k$2@news.albasani.net>
Source record: 3253

On Tue, 17 Feb 2009 08:25:16 -0800, Ross, NS7F wrote:

> This is with regards to a medium-power (~50W) CW transmitter that I am
> building for 40, 20, 15, & 10m. I would like to use relays to switch the
> output filters, but have no idea what kind of relay I will need. Dr
> Sabin mentioned that a high-quality relay is required (http://
> www.google.com/url?url=http://groups.google.com/g/d5a7ff03/
t/3d5e036fddd024eb/d/355b6c8e64361096%3Fhl%3Den%26ie%3DUTF-8%26oe%3Dutf-8%
26q%3Dsabin%2Brelay%2Bband%2Bfilter%23355b6c8e64361096&ei=u-SaSdCSGIOU-
wGVlcGnBQ&sa=t&ct=res&cd=1&source=groups&usg=AFQjCNHG7VKozzInElLsIi0baYXpyphcAw
>) but I have been unable to find anything specific. Could anybody please
> direct me to a resource that would help me answer this question? Thank
> you very much.
>
> For reference, the transmitter is a redesign of the classic '60s
> "inexpensive 75W transmitter", originally by Lew McCoy (I believe), one
> version of which can be found at (http://www.mines.uidaho.edu/
> ~glowbugs/inexpensive75wattxmitter.pdf). It is a simple crystal-
> controlled 6AG7 followed by an 807 amplifier at 75W input (<50W output).
> The filters are from Ed Wetherhold's article- (available at
> http://www.arrl.org/tis/info/pdf/9902044.pdf) 7th order "Chebyshev With
> Added Zero" to give better second harmonic attenuation.
>
> Best regards,
> Ross, NS7F

I've found that for RF below 2m, about any really will work within
reason. Bad relays to use are reed relays or any relays where the RF
leads are wrapped or parallel with large surfaces. Yaesu and Icom use
smaller DIP based relays just like the ones at radio shack. I would
simply calculate the current at the power level you need and use the
appropriate relay. I use "KP" relays all the time. even in the 2m band.

151. Re: how to reduce charging time of capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-22 13:49:38 UTC
From: John <jrw>
Message-ID: <3ZydndT4IbyzyjzUnZ2dnUVZ8qLinZ2d@posted.plusnet>
Source record: 3254

More info on Solarroller:
http://en.wikipedia.org/wiki/Solarroller

JOHN

--

- - - -

152. Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-22 23:00:44 UTC
From: Esther & Fester Bestertester <not@me.really>
Message-ID: <0001HW.C5C7191C011A1E44B01AD9AF@news.sf.sbcglobal.net>
Source record: 3255
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I've got this antenna:

<http://www.hdtvprimer.com/ANTENNAS/cm4228.html>

From my location the 2 largest DTV transmitter clusters are approximately 60 degrees apart.

How effective would it be to modify this antenna such that each of the 2 bays pointed to each transmitter cluster?

Yes, I know it's probably best to buy 2 antennae and couple them, but funds are really scarce and I've got time on my hands.

1. Would it work?
2. What are the practical down-sides (engineering blasphemies aside)?

I know this is not an elegant solution, so if your only comment is to say this, please resist.

Thanks.

153. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-22 23:12:02 UTC
From: Tio Pedro <radioconnection@cox.net>
Message-ID: <9Zkol.46432$RJ7.41918@newsfe18.iad>
Source record: 3256
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I'd think you'd really sacrifice the VHF hi-band coverage if you do so. Do you, or will you, have and digital stations that will remain in the VHF band?

Pete

154. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-22 23:28:02 UTC
From: Bill M <radioexray@geeemail.com>
Message-ID: <gnsn2a02c53@news2.newsguy.com>
Source record: 3257
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Esther & Fester Bestertester wrote:
> I've got this antenna:
>
> <http://www.hdtvprimer.com/ANTENNAS/cm4228.html>
>
> From my location the 2 largest DTV transmitter clusters are approximately 60
> degrees apart.
>
> How effective would it be to modify this antenna such that each of the 2 bays
> pointed to each transmitter cluster?
>
> Yes, I know it's probably best to buy 2 antennae and couple them, but funds
> are really scarce and I've got time on my hands.
>
> 1. Would it work?
> 2. What are the practical down-sides (engineering blasphemies aside)?
>
> I know this is not an elegant solution, so if your only comment is to say
> this, please resist.
>
> Thanks.
>
Can't find an old Tenna-Rotor for cheap? Me neither.

Hate to suggest hacking up your antenna but sure, I think you could
'bend' it down the middle 60 degrees and accomplish that.

In the analog days that might have resulted in terrible ghosting but the
latest 8VSB technology can operate even with a multipath signal at 1-2db
down.

(That also means that if you have a 2004 vintage DTV or DTV converter it
might not work if multipath comes into play)

Second idea. If you are in a fairly strong reception area why not
simply build a pair of homebrew antennas before hacking up your good
one? There's some plans on the web, one notorious one is on YouTube
with DIY instructions.

-Bill

155. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-22 23:32:58 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <e62e7222-3d24-4d31-b9f7-614640da7a11@v19g2000yqn.googlegroups.com>
Source record: 3258
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Feb 22, 6:00 pm, Esther & Fester Bestertester <n...@me.really>
wrote:
> I've got this antenna:
>
> <http://www.hdtvprimer.com/ANTENNAS/cm4228.html>
>
> From my location the 2 largest DTV transmitter clusters are approximately 60
> degrees apart.
>
> How effective would it be to modify this antenna such that each of the 2 bays
> pointed to each transmitter cluster?
>
> Yes, I know it's probably best to buy 2 antennae and couple them, but funds
> are really scarce and I've got time on my hands.
>
> 1. Would it work?
> 2. What are the practical down-sides (engineering blasphemies aside)?
>
> I know this is not an elegant solution, so if your only comment is to say
> this, please resist.
>
> Thanks.

I think hacking an antenna so that half is pointing in one direction
and half 60 degrees awy would be worse than just pointing the antenna
half way between the two TV clusters.

Jimmie

156. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-22 23:38:55 UTC
From: Tio Pedro <radioconnection@cox.net>
Message-ID: <lmlol.19722$g63.6848@newsfe24.iad>
Source record: 3259
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

http://www.wa5vjb.com/references/CheapYagi4HDTV.pdf

Well, if funds are tight, and you have time, build two of
these antennas designed by Kent Britain. They'll work
better than the antenna you cited (for UHF), and also
have the benefit of being 75-ohm impedance.

Pete k1zjh

157. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-23 01:27:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2fu3q49rtg1qltrvtia6g76nu0l6jk1ipi@4ax.com>
Source record: 3260
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Sun, 22 Feb 2009 15:00:44 -0800, Esther & Fester Bestertester
<not@me.really> wrote:

><http://www.hdtvprimer.com/ANTENNAS/cm4228.html>
>
>From my location the 2 largest DTV transmitter clusters are approximately 60
>degrees apart.
>
>How effective would it be to modify this antenna such that each of the 2 bays
>pointed to each transmitter cluster?

hacksaw the top and bottom angle bars to just break the lip that
extends out from the mast (rather than lays against the mast).

Bend the angle bars and screen 60 degrees along the length of the mast
so that each side points towards the separate transmitter clusters.
(Giving the appearance of a ship prow pointing halfway between the two
clusters.)

Effectivity? You lose up to 3dB gain; your nulls fill in somewhat;
you don't spend any money.

73's
Richard Clark, KB7QHC

158. Re: 6L6 substitute

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-23 01:44:39 UTC
From: 998cc <hrd998cc@yahoo.com>
Message-ID: <jcnol.14413$as4.4443@nlpi069.nbdc.sbc.com>
Source record: 3261

Check out the 6CD6, 20 watts plate dissipation; max plate volts 700. The 6DQ6 is a similar tube but onlt 18 watts PD but handles 770 volts. The next step up will be novar/duodecar compactron color TV sweep tubes which can be expensive due to the explosion of sweep tube CB linear amps in past years/decades.

Why not just design it around a 6146?? Easy to find--and maybe free from another ham.

Best 73.
Russ

"ken scharf" <wa2mzeNOSPAMBOTS@bellsouth.net> wrote in message news:q486l.14057$M01.1560@bignews3.bellsouth.net...
> JIMMIE wrote:
>> After years of avoiding morse code I am finally getting into it. the
>> ideal of operating a very simple transmitter appeals to my junkbox/
>> trashcan construction mentality.
>> I am looking for a substitue for a 6L6 that has the plate brought out
>> the top. I was trying to build a little Glowbug transmitter but was
>> having all kinds of problems neutralizing the the thing. I think I
>> would have better luck if I can separate the grid and plate circuits
>> from each other. I am considering an 807 as a replacement Suggestions
>> would be appreciated.
>>
>> Jimmie
> To Hijack an old thread...
>
> The way tubes were numbered sometimes....
> The 25L6 and 50L6 are NOT 6L6's with different heater voltages.
> Actually both of these tubes are IDENTICAL with the 6W6GT except for the
> heater ratings.

159. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-23 09:50:40 UTC
From: Esther & Fester Bestertester <not@me.really>
Message-ID: <0001HW.C5C7B170013DD1A8B01AD9AF@news.sf.sbcglobal.net>
Source record: 3262
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

> http://www.wa5vjb.com/references/CheapYagi4HDTV.pdf
>
> Well, if funds are tight, and you have time, build two of
> these antennas designed by Kent Britain. They'll work
> better than the antenna you cited (for UHF), and also
> have the benefit of being 75-ohm impedance.
>
> Pete k1zjh

If I DIY, I'll need only one; I'll keep the 4228 and couple it with the DIY.

How do I couple two antennae onto one cable?

Thanks.

160. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-23 11:32:51 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <xD3mwNSjlooJFw5u@g3ohx.demon.co.uk>
Source record: 3263
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In message <2fu3q49rtg1qltrvtia6g76nu0l6jk1ipi@4ax.com>, Richard Clark
<kb7qhc@comcast.net> writes
>On Sun, 22 Feb 2009 15:00:44 -0800, Esther & Fester Bestertester
><not@me.really> wrote:
>
>><http://www.hdtvprimer.com/ANTENNAS/cm4228.html>
>>
>>From my location the 2 largest DTV transmitter clusters are approximately 60
>>degrees apart.
>>
>>How effective would it be to modify this antenna such that each of the 2 bays
>>pointed to each transmitter cluster?
>
>hacksaw the top and bottom angle bars to just break the lip that
>extends out from the mast (rather than lays against the mast).
>
>Bend the angle bars and screen 60 degrees along the length of the mast
>so that each side points towards the separate transmitter clusters.
>(Giving the appearance of a ship prow pointing halfway between the two
>clusters.)
>
>Effectivity? You lose up to 3dB gain; your nulls fill in somewhat;
>you don't spend any money.
>
If you can stand a loss of 3dB, I reckon that should work OK.

As you increase the angle between the two parts of the antenna, the
presently 'pointed' polar diagram will broaden and flatten, then it will
start going heart-shaped (with an increasingly deep null in the centre).
The only downside is that, when you are looking at one transmitter, you
will be picking any reflections coming from the direction of the other.
But, being digital, you will probably get away with it.

Just one point: I'm wondering if, for the highest gain towards each
transmitter, the bend should be 60 degrees - or maybe something a bit
more would be better?
--
Ian

161. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-23 11:57:57 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <v6udnRjJ9fLYEj_UnZ2dnUVZ_rrinZ2d@bright.net>
Source record: 3264
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Esther & Fester Bestertester wrote:
>>http://www.wa5vjb.com/references/CheapYagi4HDTV.pdf
>>
>>Well, if funds are tight, and you have time, build two of
>>these antennas designed by Kent Britain. They'll work
>>better than the antenna you cited (for UHF), and also
>>have the benefit of being 75-ohm impedance.
>>
>>Pete k1zjh
>
>
> If I DIY, I'll need only one; I'll keep the 4228 and couple it with the DIY.
>
> How do I couple two antennae onto one cable?
>
> Thanks.
>
TV splitter. Any place such as Best Buy, Wal Mart, Radio Shack should
have them. Normally used to split one antenna to two TVs. Just reverse
it and put it up by the antennas. This will "combine" the two antennas
and send the signals down one coax to the TV.

Scott
N0EDV

162. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-23 12:18:10 UTC
From: Highland Ham <rfburns@allbands.net>
Message-ID: <G42dnR3iQYKeCT_UnZ2dnUVZ8vCdnZ2d@pipex.net>
Source record: 3265
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

>> How do I couple two antennae onto one cable?
>>
>> Thanks.
>>
> TV splitter. Any place such as Best Buy, Wal Mart, Radio Shack should
> have them. Normally used to split one antenna to two TVs. Just reverse
> it and put it up by the antennas. This will "combine" the two antennas
> and send the signals down one coax to the TV.
>
> Scott N0EDV
==========
Have a Time Warner labeled cable TV splitter here: 5 -1000 MHz with
F-type female connectors. Attenuation 3.5 dB applicable to each channel
Ex US fleamarket

Frank GM0CSZ / KN6WH

163. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-23 13:12:29 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <rlQAJ4B9CqoJFw5Z@g3ohx.demon.co.uk>
Source record: 3266
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In message <G42dnR3iQYKeCT_UnZ2dnUVZ8vCdnZ2d@pipex.net>, Highland Ham
<rfburns@allbands.net> writes
>
>>> How do I couple two antennae onto one cable?
>>>
>>> Thanks.
>>>
>> TV splitter. Any place such as Best Buy, Wal Mart, Radio Shack
>>should have them. Normally used to split one antenna to two TVs.
>>Just reverse it and put it up by the antennas. This will "combine"
>>the two antennas and send the signals down one coax to the TV.
>> Scott N0EDV
>==
>Have a Time Warner labeled cable TV splitter here: 5 -1000 MHz with
>F-type female connectors. Attenuation 3.5 dB applicable to each
>channel Ex US fleamarket
>
>Frank GM0CSZ / KN6WH

If it had been for analogue, I would have said no, no, no, no, no, no -
never EVER use a wideband splitter to combiner two antenna feeds. When
you are looking at one transmitter, you will be picking any reflections
coming from the direction of the other. However, as this is digital, you
may get away with it (just like bending the antenna to obtain two
lobes).

However, you are far, far better off with a separate feeder and a 2-way
A/B switch. They are only a few dollars each.
--
Ian

164. lot of antique transistor radios-KOYO PARROT-SONY-AIRWAY DELUXE-WESTINGHOUSE-MOTOROLA-GE-RCA-more

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-23 13:35:28 UTC
From: thepeddler09@yahoo.com
Message-ID: <ecfe9b62-66ed-46ff-8e73-d6f5ac2d3b11@33g2000yqm.googlegroups.com>
Source record: 3267

estate sale of a radio collector-clearance !

http://shop.ebay.com/merchant/66-catalina_W0QQ_nkwZQQ_armrsZ1QQ_fromZQQ_mdoZ

VINTAGE GE TRANSISTOR RADIO-LARGE BATTERY-TESTED/WORKS- 0 Bids
$24.99 6d 13h 56m
GE TRANSISTOR RADIO-VINTAGE P-1728, TESTED & IT WORKS-$ 0 Bids $9.98
6d 13h 56m
KOYO PARROT KR-4S1 SUBMINIATURE TUBE RADIO-WHITE-RARE!! 0 Bids
$199.88
$400.00 6d 13h 56m
RCA MODEL RZG 101J VINTAGE TRANSISTOR RADIO-COMPLETE-$ 0 Bids $9.98
6d 13h 56m
WESTINGHOUSE MOD.H-938P6GP WHITE TRANSISTOR RADIO-$$$$$ 0 Bids $9.98
6d 13h 56m
MOTOROLA X23E VINTAGE TRANSISTOR RADIO-complete-$$$ 0 Bids $9.98 6d
13h 56m
VINTAGE EXPO '70 TRANSISTOR RADIO-YELLOW-COMPLETE-$$$$$ 0 Bids
$24.99 6d 13h 56m
AIRWAY DELUXE TRANSISTOR RADIO MODEL YT-161 working !!! 0 Bids
$24.99 6d 13h 56m

165. "Essentials of Radio" text book

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-23 13:50:43 UTC
From: Old Mac User <chendrixstats@yahoo.com>
Message-ID: <66b8abdb-ba02-4248-9722-0c853fd88fb6@e3g2000vbe.googlegroups.com>
Source record: 3268

"Essentials of Radio" by Morris Slurzberg and William Osterheld.
McGraw-Hill Books; 1948; Hardback; 805 pages

Introduction to radio
Circuit analysis
Simple receiving circuits
Vacuum tubes
Detector circuits
Tuning circuits
RF amplified circuits
Audio-frequency voltage amplified circuits
Power amplified circuits
Vacuum-tube oscillator circuits
Power supply circuits
Audio units
Transmitting circuits
Receiving circuits
Test equipment
and 18 sections in the appendix.

This was written and published when books were made with quality.
It's in excellent condition. No writing inside other than my name
stamped inside the cover.

Realize this was written in the "vacuum tube era".

$25 + shipping.
Shipping will be "media mail" via U.S. Post Office.
That's the cheapest rate for books.

Please use Reply to Author when responding.
That will get the fastest attention.

166. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-23 16:22:26 UTC
From: Rob <nomail@example.com>
Message-ID: <slrngq5ja2.hv.nomail@xs7.xs4all.nl>
Source record: 3269
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote:
> However, you are far, far better off with a separate feeder and a 2-way
> A/B switch. They are only a few dollars each.

And then, what? Walk to the switch to throw it from A to B or vice-versa
every time you zap to another channel?
That does not sound like "better off" to me...

167. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-23 16:50:34 UTC
From: Esther & Fester Bestertester <not@me.really>
Message-ID: <0001HW.C5C813DA0154E27FB01AD9AF@news.sf.sbcglobal.net>
Source record: 3270
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

> However, you are far, far better off with a separate feeder and a 2-way
> A/B switch. They are only a few dollars each.

Better in the sense of being there to throw the switch, maybe. But I've got a programmable-event DTV converter box which allows me to record shows automatically. The antenna set-up needs to be automated.

Thanks.

168. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-23 17:15:51 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <LDeogvFHntoJFwvs@g3ohx.demon.co.uk>
Source record: 3271
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In message <slrngq5ja2.hv.nomail@xs7.xs4all.nl>, Rob
<nomail@example.com> writes
>Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote:
>> However, you are far, far better off with a separate feeder and a 2-way
>> A/B switch. They are only a few dollars each.
>
>And then, what? Walk to the switch to throw it from A to B or vice-versa
>every time you zap to another channel?
>That does not sound like "better off" to me...

As I'm sure you know, Sunshine, life's tough at times. 'Ye canna change
the laws of physics'.
--
Ian

169. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-23 17:54:05 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <aio5q411vqju5khalr7tf402af6thmdnr4@4ax.com>
Source record: 3272
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Mon, 23 Feb 2009 11:32:51 +0000, Ian Jackson
<ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote:

>>From my location the 2 largest DTV transmitter clusters are approximately 60
>>degrees apart.
...
>>Bend the angle bars and screen 60 degrees along the length of the mast
>>so that each side points towards the separate transmitter clusters.
...
> the bend should be 60 degrees - or maybe something a bit
>more would be better?

?

73's
Richard Clark, KB7QHC

170. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-23 19:04:16 UTC
From: dplatt@radagast.org
Message-ID: <gi8b76-90f.ln1@radagast.org>
Source record: 3273
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

>Better in the sense of being there to throw the switch, maybe. But I've got a
>programmable-event DTV converter box which allows me to record shows
>automatically. The antenna set-up needs to be automated.

Some DTV converter boxes support the CEA-909 or CEA-909A "smart antenna" interface, which allow a command to be sent to the antenna to change the antenna's behavior (directionality, frequency setting, etc.). A good DTV converter will identify the best antenna setting for each channel (I imagine this takes place during the initial scan-for-channels process) and will switch the antenna system each time it tunes to a new channel. In CEA-909A, the signalling can be done over the same coax cable which carries the antenna signal; the older CEA-909 requires a separate control cable.

Not all converter boxes support this feature, and of course you need to have an antenna which has Smart Antenna support.

Unfortunately, the Smart Antenna specs are not freely available... a hardcopy or download version costs somewhere in the neighborhood of $70. I don't know if anyone has reverse-engineered the data format.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

171. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-23 19:16:32 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <Vw7f8qDQYvoJFwuM@g3ohx.demon.co.uk>
Source record: 3275
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In message <aio5q411vqju5khalr7tf402af6thmdnr4@4ax.com>, Richard Clark
<kb7qhc@comcast.net> writes
>On Mon, 23 Feb 2009 11:32:51 +0000, Ian Jackson
><ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote:
>
>>>From my location the 2 largest DTV transmitter clusters are approximately 60
>>>degrees apart.
>...
>>>Bend the angle bars and screen 60 degrees along the length of the mast
>>>so that each side points towards the separate transmitter clusters.
>...
>> the bend should be 60 degrees - or maybe something a bit
>>more would be better?
>
>?
>
!!!

Well, if you put a smallish bend in the antenna of (say) 10 degrees, you will still have one lobe, although it wider and the gain will be lower. Only when you increase the bend to (maybe) 20 degrees will you start to get two separate lobes.

I'm somewhat guessing, but I reckon that the angle between the two lobes will continue to be less than the angle of bend until the bend is considerable - and possibly more than the 60 degrees between the transmitters. Eventually, the angle between the lobes will 'catch up' with the angle of the bend - but maybe only when the bend is a full 180 degrees.

So, for the two lobes really to be 60 degrees apart, maybe the bend will have to be (say) 65 degrees? What do you reckon?
--
Ian

172. Re: WIA 'Amateur Radio' 10m FM Tcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-23 19:18:08 UTC
From: John <jrw>
Message-ID: <IMednQBqwcEoaD_UnZ2dnUVZ8trinZ2d@posted.plusnet>
Source record: 3274

I now have it thanks.

JOHN M5AML

www.wells10000.plus.com/m5aml

173. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-23 20:11:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ed06q4pegvmvk4u6kkr8ukik0jojocs0q2@4ax.com>
Source record: 3276
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Mon, 23 Feb 2009 19:16:32 +0000, Ian Jackson
<ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote:
>I'm somewhat guessing, but I reckon that the angle between the two lobes
>will continue to be less than the angle of bend until the bend is
>considerable - and possibly more than the 60 degrees between the
>transmitters. Eventually, the angle between the lobes will 'catch up'
>with the angle of the bend - but maybe only when the bend is a full 180
>degrees.
>
>So, for the two lobes really to be 60 degrees apart, maybe the bend will
>have to be (say) 65 degrees? What do you reckon?

Hi Ian,

That sounds more reasonable, but I would suspect that when the hammer
is swung, that 5 degree slop will par for the course. It will take
more sophistication to peak both clusters independantly to prove your
point, but it could well be.

73's
Richard Clark, KB7QHC

174. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-23 20:33:02 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <kLgjCwQ+fwoJFw74@g3ohx.demon.co.uk>
Source record: 3277
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In message <ed06q4pegvmvk4u6kkr8ukik0jojocs0q2@4ax.com>, Richard Clark
<kb7qhc@comcast.net> writes
>On Mon, 23 Feb 2009 19:16:32 +0000, Ian Jackson
><ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote:
>>I'm somewhat guessing, but I reckon that the angle between the two lobes
>>will continue to be less than the angle of bend until the bend is
>>considerable - and possibly more than the 60 degrees between the
>>transmitters. Eventually, the angle between the lobes will 'catch up'
>>with the angle of the bend - but maybe only when the bend is a full 180
>>degrees.
>>
>>So, for the two lobes really to be 60 degrees apart, maybe the bend will
>>have to be (say) 65 degrees? What do you reckon?
>
>Hi Ian,
>
>That sounds more reasonable, but I would suspect that when the hammer
>is swung, that 5 degree slop will par for the course. It will take
>more sophistication to peak both clusters independantly to prove your
>point, but it could well be.
>
>73's
>Richard Clark, KB7QHC

I thought I wasn't talking total rubbish (like I usually do).

Unfortunately, I've just spotted a problem with bending the antenna. If
you cut partially through the two angle bars to weaken them, and then
bend them and the reflector backwards by 60 degrees, the 'feeder' which
joins the two halves of the antenna will have to be stretched - and you
won't be able to do that. You would have to replace it.

Nah... It would be silly to ruin a handsome antenna. Far better to put
up a separate antenna and feeder, and use some sort of A/B switch at the
TV end.
--
Ian

175. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-23 20:59:13 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <ebd65c07-ff25-4c6f-a49a-2b4d6eeab366@e24g2000vbe.googlegroups.com>
Source record: 3278
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Feb 22, 6:00 pm, Esther & Fester Bestertester <n...@me.really>
wrote:
> I've got this antenna:
>
> <http://www.hdtvprimer.com/ANTENNAS/cm4228.html>
>
> From my location the 2 largest DTV transmitter clusters are approximately 60
> degrees apart.
>
> How effective would it be to modify this antenna such that each of the 2 bays
> pointed to each transmitter cluster?
>
> Yes, I know it's probably best to buy 2 antennae and couple them, but funds
> are really scarce and I've got time on my hands.
>
> 1. Would it work?
> 2. What are the practical down-sides (engineering blasphemies aside)?
>
> I know this is not an elegant solution, so if your only comment is to say
> this, please resist.
>
> Thanks.

Hey OM
I guess nobody here is a youtuber? I seen on youtube a guy has a 4 bay
bow tie, shows how to make one for chump change. Like 5 steel wire
coat hangers and a 2 ft 1X2 and some screws, and a balun transformer.
I saw it on youtube he makes a 4 bay bow tie antenna in under 5
minutes. It doesn't have a screen reflector, it's more like
bidirectional, well almost.

73 OM
de n8zu

176. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-23 20:59:25 UTC
From: Tio Pedro <radioconnection@cox.net>
Message-ID: <S6Eol.23441$pX4.21842@newsfe08.iad>
Source record: 3279
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"Esther & Fester Bestertester" <not@me.really> wrote in message
news:0001HW.C5C7B170013DD1A8B01AD9AF@news.sf.sbcglobal.net...
>> http://www.wa5vjb.com/references/CheapYagi4HDTV.pdf
>>
>> Well, if funds are tight, and you have time, build two of
>> these antennas designed by Kent Britain. They'll work
>> better than the antenna you cited (for UHF), and also
>> have the benefit of being 75-ohm impedance.
>>
>> Pete k1zjh
>
> If I DIY, I'll need only one; I'll keep the 4228 and couple it with the
> DIY.
>
> How do I couple two antennae onto one cable?
>
> Thanks.
>

You can't; one is 75 ohms and it looks like the one you have
is 300 ohms. You'd need a balun on the 300-ohm bowtie antenna to
make it 75 ohms, and then use a TV combiner/splitter to
combine the two antenna feedlines down to one single
feedline.

Pete

177. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-23 22:49:33 UTC
From: SparkyGuy <sparkyguy@mumcrank.ck>
Message-ID: <0001HW.C5C867FD01689AAAB01AD9AF@news.sf.sbcglobal.net>
Source record: 3280
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

> I guess nobody here is a youtuber?

This is my favorite ;-) (note that that's a wink emoti)

<http://www.youtube.com/watch?v=TRS4GMGJr7M>

178. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-23 22:55:54 UTC
From: Esther & Fester Bestertester <not@me.really>
Message-ID: <0001HW.C5C8697A0168F3DAB01AD9AF@news.sf.sbcglobal.net>
Source record: 3281
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

> I guess nobody here is a youtuber? I seen on youtube a guy has a 4 bay
> bow tie, shows how to make one for chump change. Like 5 steel wire
> coat hangers and a 2 ft 1X2 and some screws, and a balun transformer.
> I saw it on youtube he makes a 4 bay bow tie antenna in under 5
> minutes. It doesn't have a screen reflector, it's more like
> bidirectional, well almost.

I don't see that one, but this one has several possible configurations, one
of which includes multiple bays aimed in different directions:

<http://www.youtube.com/watch?v=Y0m6AfR-9As&NR=1>

Thanks.

179. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-23 23:17:51 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <aXIsFepf6yoJFw8J@g3ohx.demon.co.uk>
Source record: 3282
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In message <0001HW.C5C8697A0168F3DAB01AD9AF@news.sf.sbcglobal.net>,
Esther & Fester Bestertester <not@me.really> writes
>> I guess nobody here is a youtuber? I seen on youtube a guy has a 4 bay
>> bow tie, shows how to make one for chump change. Like 5 steel wire
>> coat hangers and a 2 ft 1X2 and some screws, and a balun transformer.
>> I saw it on youtube he makes a 4 bay bow tie antenna in under 5
>> minutes. It doesn't have a screen reflector, it's more like
>> bidirectional, well almost.
>
>I don't see that one, but this one has several possible configurations, one
>of which includes multiple bays aimed in different directions:
>
><http://www.youtube.com/watch?v=Y0m6AfR-9As&NR=1>
>
Umm .....
I've skipped through the video, so maybe I've missed one or two key
facts. However:
1. Are there three identical antenna, each pointing 120 degrees apart,
each with its own feeder, or
Are all three combined to make an approximately omnidirectional antenna?
2. The reflector seems to be far too close to the active elements. I
would have expected it to be a quarter wavelength away.
--
Ian

180. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-23 23:31:37 UTC
From: SparkyGuy <sparkyguy@mumcrank.ck>
Message-ID: <0001HW.C5C871D9016AEA4AB01AD9AF@news.sf.sbcglobal.net>
Source record: 3283
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

> 2. The reflector seems to be far too close to the active elements. I
> would have expected it to be a quarter wavelength away.

It's "2x4" separation... ;-)

181. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-23 23:45:44 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <gnliZNsoUzoJFwpP@g3ohx.demon.co.uk>
Source record: 3284
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In message <0001HW.C5C871D9016AEA4AB01AD9AF@news.sf.sbcglobal.net>,
SparkyGuy <sparkyguy@mumcrank.ck> writes
>> 2. The reflector seems to be far too close to the active elements. I
>> would have expected it to be a quarter wavelength away.
>
>It's "2x4" separation... ;-)
>
OK. What IS "2x4" separation?
--
Ian

182. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-24 00:56:58 UTC
From: SparkyGuy <sparkyguy@mumcrank.ck>
Message-ID: <0001HW.C5C885DA016F9A84B04379AF@news.sf.sbcglobal.net>
Source record: 3285
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

>> It's "2x4" separation... ;-)

> OK. What IS "2x4" separation?

Sorry, that was a little American-centric comment (must remember: Imperial Measurement System is not universal...)

The most basic standard lumber used in construction in N. America is the 2x4 stud (2 inches x 4 inches cross-section, available in 8, 10, 12, 16, and (I think) 20 foot lengths).

This is what the guy building the antenna is using as the structural wood members.

Dave

183. Smith Chart Tutorial

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-24 01:09:19 UTC
From: bulegoge@columbus.rr.com
Message-ID: <805d5ff2-47da-44b1-a987-151dc2ffef55@13g2000yql.googlegroups.com>
Source record: 3286

Hi,

I have created a Smith Chart Tutorial located here:

http://www.fourier-series.com/rf-concepts/smithchart.html

It is comprised of flash programs with embedded audio. It allows you to learn the smith chart through the interactive nature of the flash program.

I The tutorial explains the smith chart, allows for capacitive/inductive matching and introduces how a transmision line affects the reflection coefficient and how to use transmission line stubs as matching elements.

Good Luck with this

Brent

184. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-24 01:49:31 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <DrOdnSvuwNuwzz7UnZ2dnUVZ_vGdnZ2d@posted.easystreetonline>
Source record: 3287
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

SparkyGuy wrote:
> . . .
> The most basic standard lumber used in construction in N. America is the 2x4
> stud (2 inches x 4 inches cross-section, available in 8, 10, 12, 16, and (I
> think) 20 foot lengths). . .

Actually, dimensional lumber has shrunk over the years just like candy bars and dollars. Only in very old houses will you find 2 X 4s that are 2" X 4". I'm getting pretty geezerly, and it was before my day -- they were down to 1-5/8" X 3-5/8" at the earliest I can remember. Now a "two-by-four" has shrunk to 1-1/2" X 3-1/2". When they get down to 2 X 4 cm, we can finally go metric without having to do any conversions. Maybe when they get down to 1/4 X 1/2 inch they'll get revalued like a peso?

Roy Lewallen, W7EL

185. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-24 08:05:05 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <Y1jM9cAxo6oJFw$W@g3ohx.demon.co.uk>
Source record: 3288
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In message <gnliZNsoUzoJFwpP@g3ohx.demon.co.uk>, Ian Jackson
<ianREMOVETHISjackson@g3ohx.demon.co.uk> writes
>In message <0001HW.C5C871D9016AEA4AB01AD9AF@news.sf.sbcglobal.net>,
>SparkyGuy <sparkyguy@mumcrank.ck> writes
>>> 2. The reflector seems to be far too close to the active elements. I
>>> would have expected it to be a quarter wavelength away.
>>
>>It's "2x4" separation... ;-)
>>
>OK. What IS "2x4" separation?

OK. Too late last night to 'twig'! But don't you mean "4x2"?
--
Ian

186. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-24 09:17:04 UTC
From: SparkyGuy <sparkyguy@mumcrank.ck>
Message-ID: <0001HW.C5C8FB10018B1304B01AD9AF@news.sf.sbcglobal.net>
Source record: 3289
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

> OK. Too late last night to 'twig'! But don't you mean "4x2"?

"Po-tay-to", "po-tah-to".

Actually I mean 1-1/2 x 3-1/2. ;-)

187. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-24 09:32:22 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <FG27hhIm67oJFwvc@g3ohx.demon.co.uk>
Source record: 3290
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In message <0001HW.C5C8FB10018B1304B01AD9AF@news.sf.sbcglobal.net>,
SparkyGuy <sparkyguy@mumcrank.ck> writes
>> OK. Too late last night to 'twig'! But don't you mean "4x2"?
>
>"Po-tay-to", "po-tah-to".
>
>Actually I mean 1-1/2 x 3-1/2. ;-)
>
Well, surely 1.5 inches is nowhere near enough? However, I suppose it
preserves that nice slimline look.
--
Ian

188. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-24 21:50:52 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <1a221a01-4140-4008-bfc1-9783de97908d@f24g2000vbf.googlegroups.com>
Source record: 3291
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Feb 23, 5:55 pm, Esther & Fester Bestertester <n...@me.really>
wrote:
> > I guess nobody here is a youtuber? I seen on youtube a guy has a 4 bay
> > bow tie, shows how to make one for chump change. Like 5 steel wire
> > coat hangers and a 2 ft 1X2 and some screws, and a balun transformer.
> > I saw it on youtube he makes a 4 bay bow tie antenna in under 5
> > minutes. It doesn't have a screen reflector, it's more like
> > bidirectional, well almost.
>
> I don't see that one, but this one has several possible configurations, one
> of which includes multiple bays aimed in different directions:
>
> <http://www.youtube.com/watch?v=Y0m6AfR-9As&NR=1>
>
> Thanks.

Hey OM
This is the youtube video I ment: http://www.youtube.com/watch?v=EWQhlmJTMzw
6 coathangers and 7 minutes long.

73 OM
de n8zu

189. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-24 22:41:52 UTC
From: DaveC <me@bogusdomain.net>
Message-ID: <0001HW.C5C9B7B001B74859B04379AF@news.sf.sbcglobal.net>
Source record: 3292
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

> http://www.youtube.com/watch?v=EWQhlmJTMzw

What are the critical dimensions? If one wanted to use better materials (plastic rather than wood for the base; aluminum tube rather than wire), how does one calculate the dimensions?

I mean, "about 2 inches down" and "about 5-3/4 inches between elements", and "tips about 3 inches apart" are the results of some calculations. What are the calculations that determine these dimensions for this style of antenna?

Thanks,
--
DaveC
me@bogusdomain.net
This is an invalid return address
Please reply in the news group

190. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-24 22:56:55 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <1uz374a3sHpJFwj5@g3ohx.demon.co.uk>
Source record: 3293
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In message <0001HW.C5C9B7B001B74859B04379AF@news.sf.sbcglobal.net>,
DaveC <me@bogusdomain.net> writes
>> http://www.youtube.com/watch?v=EWQhlmJTMzw
>
>What are the critical dimensions? If one wanted to use better materials
>(plastic rather than wood for the base; aluminum tube rather than wire), how
>does one calculate the dimensions?
>
>I mean, "about 2 inches down" and "about 5-3/4 inches between elements", and
>"tips about 3 inches apart" are the results of some calculations. What are
>the calculations that determine these dimensions for this style of antenna?
>
All dimensions will be approximately +/- 0.001".

Seriously, when the antenna simply gets dumped behind the TV set, do you
really think that any of the dimensions will be very critical?
--
Ian

191. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-25 00:56:50 UTC
From: DaveC <me@bogusdomain.net>
Message-ID: <0001HW.C5C9D75201BEB22FB04379AF@news.sf.sbcglobal.net>
Source record: 3294
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

> Seriously, when the antenna simply gets dumped behind the TV set, do you
> really think that any of the dimensions will be very critical?

If one were to build something to better specs, with better materials, in a
much better location (not dumped behind anything)?

I presume there's antenna design formulae that result in the proper
dimensions for this type of antenna. Where can I find this information
(preferably on-line)?

With my Google criteria, I don't find much that's useful.

Thanks.
--
DaveC
me@bogusdomain.net
This is an invalid return address
Please reply in the news group

192. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-25 02:23:24 UTC
From: dplatt@radagast.org
Message-ID: <slme76-1na.ln1@radagast.org>
Source record: 3295
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

>> Seriously, when the antenna simply gets dumped behind the TV set, do you
>> really think that any of the dimensions will be very critical?
>
>If one were to build something to better specs, with better materials, in a
>much better location (not dumped behind anything)?
>
>I presume there's antenna design formulae that result in the proper
>dimensions for this type of antenna. Where can I find this information
>(preferably on-line)?

The following may be useful:

http://www.digitalhome.ca/ota/superantenna/index.htm

Single- and double-bay Gray-Hoverman UHF antennas, which can be built
using either of several styles of reflector - a full screen, a split
screen, or a set of collinear rods.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

193. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-25 04:46:35 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <d36b413a-da35-430c-b8c2-a34816a62fce@v19g2000yqn.googlegroups.com>
Source record: 3296
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Feb 24, 5:56 pm, Ian Jackson
<ianREMOVETHISjack...@g3ohx.demon.co.uk> wrote:
> In message <0001HW.C5C9B7B001B74859B0437...@news.sf.sbcglobal.net>,
> DaveC <m...@bogusdomain.net> writes>>http://www.youtube.com/watch?v=EWQhlmJTMzw
>
> >What are the critical dimensions? If one wanted to use better materials
> >(plastic rather than wood for the base; aluminum tube rather than wire), how
> >does one calculate the dimensions?
>
> >I mean, "about 2 inches down" and "about 5-3/4 inches between elements", and
> >"tips about 3 inches apart" are the results of some calculations. What are
> >the calculations that determine these dimensions for this style of antenna?
>
> All dimensions will be approximately +/- 0.001".
>
> Seriously, when the antenna simply gets dumped behind the TV set, do you
> really think that any of the dimensions will be very critical?
> --
> Ian

When I lived in the Air Force barracks a guy bought a very similar
antenna at Radio Shack. This was after cable had been removed because
so many people were stealing it.
Anyway it didnt take long before everyone started building their own
antenna copied from the RS one. The stock of brazing rods at the
motorpool was depleated very quickly.

Funny thing, I was accused of stealing cable though I wasnt hooked up
to it. I was able to demonstrate to the First Sargent that I could
receive Cable TV just off of the leakage from the system and argued
that the Cable company had the responsibility to prevent radiation
from their equipment. He agreed. What I learned was really happening
was that the guy in the room next to me had his rabbit ears connected
to the cable input of his TV and was broadcastinig it. About 10 rooms
could clearly pickup the signal from this. Unfortunately several
people had simply made illegal connections to the cable system. I
understand that the same thing is happening now with internaet service
in the barracks. My nephew tells me that it has been forbidden to have
a wireless router in the barracks for ths isame reason.

Jimmie

194. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-25 05:11:02 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <Gp4pl.16030$Si4.8836@newsfe22.iad>
Source record: 3297
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"Dave Platt" <dplatt@radagast.org> wrote in message
news:slme76-1na.ln1@radagast.org...

< snip >

> The following may be useful:
>
> http://www.digitalhome.ca/ota/superantenna/index.htm
>
> Single- and double-bay Gray-Hoverman UHF antennas, which can be built
> using either of several styles of reflector - a full screen, a split
> screen, or a set of collinear rods.

I see the 300 ohm feedpoint for the single bay but the double bay is a
little different. I can see something's attached to the two bars that run
vertically and join the antennas (in the photo that shows the double bay
with PVC frame), but I can't tell if there's a balun there. Do we know what
the impedance is at that point?

I may need to try reaching the people who did the web page. Thanks.

"Sal"

195. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-25 05:23:42 UTC
From: Bill M <radioexray@geeemail.com>
Message-ID: <go2kl512s3b@news2.newsguy.com>
Source record: 3298
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Sal M. Onella wrote:

>
> I see the 300 ohm feedpoint for the single bay but the double bay is a
> little different. I can see something's attached to the two bars that run
> vertically and join the antennas (in the photo that shows the double bay
> with PVC frame), but I can't tell if there's a balun there. Do we know what
> the impedance is at that point?

Given that the presumed bandwidth of the antenna ranges from 470 to 700
Mhz (not counting any VHF bonus) I figure there's no specific impedance
other than 'ballpark'.

-Bill

196. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-25 09:49:42 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <OvDp7kG2QRpJFwFL@g3ohx.demon.co.uk>
Source record: 3299
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In message <0001HW.C5C9D75201BEB22FB04379AF@news.sf.sbcglobal.net>,
DaveC <me@bogusdomain.net> writes
>> Seriously, when the antenna simply gets dumped behind the TV set, do you
>> really think that any of the dimensions will be very critical?
>
>If one were to build something to better specs, with better materials, in a
>much better location (not dumped behind anything)?
>
>I presume there's antenna design formulae that result in the proper
>dimensions for this type of antenna. Where can I find this information
>(preferably on-line)?
>
>With my Google criteria, I don't find much that's useful.
>
I don't think there's anything wrong with the materials. It's basically
a sound design. It's just that (unless I'm very much mistaken) the
elements need be around a quarterwave in front of the reflector (more
like 6 inches instead of the less than 2 inches shown), and you need to
mount the antenna 'in the clear', and point it towards the transmitter.
Obviously, with these materials, the antenna is best suited to mounting
in a loft, provided that the roof tiles and lining are adequately
transparent to UHF RF.
--
Ian

197. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-25 11:20:27 UTC
From: Highland Ham <rfburns@allbands.net>
Message-ID: <i5idnZ4jCP_gtDjUnZ2dnUVZ8u2dnZ2d@pipex.net>
Source record: 3300
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

JIMMIE wrote:
> snip
> Unfortunately several
> people had simply made illegal connections to the cable system. I
> understand that the same thing is happening now with internaet service
> in the barracks. My nephew tells me that it has been forbidden to have
> a wireless router in the barracks for ths isame reason.
>
> Jimmie
==========
Here in Britain it is illegal to 'tap' an individual's or
organisation's/company's Wifi for Internet Access without permission,
however with consent of the Wifi router owner it is permitted.
I know that for example in the Netherlands (usually large)houses are
often occupied by up to 20 students . With 1 Hi-speed /unlimited
download (A)DSL connection , they all share that 1 connection.
They don't need an e-mail address from the ISP but have one or more from
Google or Yahoo .

If I had a neighbour close by I would be happy to share my connection.

Frank GM0CSZ / KN6WH

198. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-25 16:54:48 UTC
From: Esther & Fester Bestertester <not@me.really>
Message-ID: <0001HW.C5CAB7D801F3517DB01AD9AF@news.sf.sbcglobal.net>
Source record: 3151
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

> I don't think there's anything wrong with the materials.

Wood is a great retainer of moisture (indeed it holds a great quantity of water). Isn't this likely to electrically short (to some degree) the elements and reduce gain or... ?

199. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-25 16:58:22 UTC
From: Esther & Fester Bestertester <not@me.really>
Message-ID: <0001HW.C5CAB8AE01F3838FB01AD9AF@news.sf.sbcglobal.net>
Source record: 3152
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

> Here in Britain it is illegal to 'tap' an individual's or
> organisation's/company's Wifi

Can you please take this to another thread of its own?

200. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-25 19:34:58 UTC
From: dplatt@radagast.org
Message-ID: <24jg76-b54.ln1@radagast.org>
Source record: 3153
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

>I don't think there's anything wrong with the materials. It's basically
>a sound design. It's just that (unless I'm very much mistaken) the
>elements need be around a quarterwave in front of the reflector (more
>like 6 inches instead of the less than 2 inches shown)

I don't think that this is necessarily true. There are many valid
antenna designs in which the reflector spacing varies quite a lot from
1/4 wavelength.

In Yagi designs, for instance, the spacing between driven element and
reflector has a big effect on the antenna's feedpoint impedance, and
is sometimes set to yield a convenient feedpoint impedance match with
the cable. It doesn't have all that much effect on forward gain.

With a "sheet reflector" antenna design, I suspect that the reflector
spacing won't have much effect on either forward gain or on
front-to-back ratio. It's entirely possible that (in this design) it
was set as it was in order to result in a not-intolerable impedance
match over the relatively broad range of frequencies that this antenna
needs to be able to cover.

> and you need to
>mount the antenna 'in the clear', and point it towards the transmitter.

Yup, that's best.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

201. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-26 01:56:57 UTC
From: Bill M <radioexray@geeemail.com>
Message-ID: <go4ste01r2l@news1.newsguy.com>
Source record: 3154
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Esther & Fester Bestertester wrote:
>> I don't think there's anything wrong with the materials.
>
> Wood is a great retainer of moisture (indeed it holds a great quantity of
> water). Isn't this likely to electrically short (to some degree) the elements
> and reduce gain or... ?
>
No doubt, so I don't think a wooden antenna is the final solution. Best
check out how the scheme might work with scrap wood and coathangers and
if that works then you could upgrade to finer materials for a more
permanent solution that works in the rain.

On the other hand it may work well for you in spite of the loss in gain.

-Bill

202. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-26 04:06:05 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <Oyopl.282$Rg3.263@newsfe17.iad>
Source record: 3155
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"Highland Ham" <rfburns@allbands.net> wrote in message
news:i5idnZ4jCP_gtDjUnZ2dnUVZ8u2dnZ2d@pipex.net...

>
> If I had a neighbour close by I would be happy to share my connection.
>
> Frank GM0CSZ / KN6WH

Nice idea in theory, bad idea in practice, since you can't monitor his PC.
If something illegal goes on from his computer, your IP address will be
logged as the source.

I note a valid objection to this thread going OT and will not post on it
again.

203. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-26 12:08:35 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <sfSdnS4J6tXYGzvUnZ2dnUVZ_uidnZ2d@bright.net>
Source record: 3156
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Bill M wrote:

> Esther & Fester Bestertester wrote:
>
>>> I don't think there's anything wrong with the materials.
>>
>>
>> Wood is a great retainer of moisture (indeed it holds a great quantity
>> of water). Isn't this likely to electrically short (to some degree)
>> the elements and reduce gain or... ?
>
> No doubt, so I don't think a wooden antenna is the final solution. Best
> check out how the scheme might work with scrap wood and coathangers and
> if that works then you could upgrade to finer materials for a more
> permanent solution that works in the rain.
>
> On the other hand it may work well for you in spite of the loss in gain.
>
> -Bill

That's what spar varnish is for. Metal booms with the uninsulated
elements going through are probably more "shorted" than from wet wood!
When aluminum is out in the rain, it's just as wet as wood would be.
The water may detune it slightly. Wood can be a great choice for boom
material (with proper varnishing)...it would probably outlast an
aluminum one in a salt air environment....

Scott
N0EDV

204. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-26 12:50:45 UTC
From: dave <dave@dave.dave>
Message-ID: <3oqdnSWyisq7DTvUnZ2dnUVZ_qvinZ2d@earthlink.com>
Source record: 3157
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Sal M. Onella wrote:
> "Highland Ham" <rfburns@allbands.net> wrote in message
> news:i5idnZ4jCP_gtDjUnZ2dnUVZ8u2dnZ2d@pipex.net...
>
>
>> If I had a neighbour close by I would be happy to share my connection.
>>
>> Frank GM0CSZ / KN6WH
>
> Nice idea in theory, bad idea in practice, since you can't monitor his PC.
> If something illegal goes on from his computer, your IP address will be
> logged as the source.
>
So?

205. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-26 13:09:20 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <ec280372-769e-4aa4-bd5e-171e9dd4e177@v38g2000yqb.googlegroups.com>
Source record: 3158
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Feb 26, 7:08 am, Scott <acepilotREM...@bloomer.net> wrote:
> Bill M wrote:
> > Esther & Fester Bestertester wrote:
>
> >>> I don't think there's anything wrong with the materials.
>
> >> Wood is a great retainer of moisture (indeed it holds a great quantity
> >> of water). Isn't this likely to electrically short (to some degree)
> >> the elements and reduce gain or... ?
>
> > No doubt, so I don't think a wooden antenna is the final solution. Best
> > check out how the scheme might work with scrap wood and coathangers and
> > if that works then you could upgrade to finer materials for a more
> > permanent solution that works in the rain.
>
> > On the other hand it may work well for you in spite of the loss in gain.
>
> > -Bill
>
> That's what spar varnish is for. Metal booms with the uninsulated
> elements going through are probably more "shorted" than from wet wood!
> When aluminum is out in the rain, it's just as wet as wood would be.
> The water may detune it slightly. Wood can be a great choice for boom
> material (with proper varnishing)...it would probably outlast an
> aluminum one in a salt air environment....
>
> Scott
> N0EDV- Hide quoted text -
>
> - Show quoted text -

In this case the wood is being used as the feedpoint insulator.

Jimmie

206. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-26 16:48:55 UTC
From: Esther & Fester Bestertester <not@me.really>
Message-ID: <0001HW.C5CC07F70036DC69B01AD9AF@news.sf.sbcglobal.net>
Source record: 3159
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

```
>> Nice idea in theory, bad idea in practice, since you can't monitor his PC.
>> If something illegal goes on from his computer, your IP address will be
>> logged as the source.

> So?

Can you please take this to another thread of its own?
```

207. Re: Smith Chart Tutorial

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-26 20:01:28 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <07a12625-a883-4f7b-a3fd-299fdf5d2d3f@33g2000yqm.googlegroups.com>
Source record: 3160

Hi Brent,

This is actually very good, well done.

If it could be made available as a stand alone application you are
heading towards a very useful educational tool.

I would prefer not to have the animated aircraft, but otherwise
excellent.

-Mark

On Feb 24, 2:09 pm, buleg...@columbus.rr.com wrote:
> Hi,
>
> I have created a Smith Chart Tutorial located here:
>
> http://www.fourier-series.com/rf-concepts/smithchart.html
>
> It is comprised of flash programs with embedded audio. It allows you
> to learn the smith chart through the interactive nature of the flash
> program.
>
> I The tutorial explains the smith chart, allows for
> capacitive/inductive matching and introduces how a transmision line
> affects the reflection coefficient and how to use transmission line
> stubs as matching elements.
>
> Good Luck with this
>
> Brent

208. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-26 23:31:22 UTC
From: Tio Pedro <radioconnection@cox.net>
Message-ID: <rDFpl.2157$Tp5.1918@newsfe13.iad>
Source record: 3161
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"Bill M" <radioexray@geeemail.com> wrote in message
news:go4ste01r2l@news1.newsguy.com...
> >> No doubt, so I don't think a wooden antenna is the final solution.
> Best check out how the scheme might work with scrap wood and coathangers
> and if that works then you could upgrade to finer materials for a more
> permanent solution that works in the rain.
>
> On the other hand it may work well for you in spite of the loss in gain.
>
> -Bill

Wood is fine, it has been used for UHF colinears for decades....
The trick is to have the elements supported (in contact with
wood) at the low voltage,
high current points. CC made a colinear back in the 60s
that used good insulators, but had them on the high voltage
points, which affected the antenna's performance.

Pete

209. Sharing Internet Connection

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-27 06:06:40 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <QpLpl.36525$g63.20199@newsfe24.iad>
Source record: 3162
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"dave" <dave@dave.dave> wrote in message
news:3oqdnSWyisq7DTvUnZ2dnUVZ_qvinZ2d@earthlink.com...

which was OT in thread "Hack a DTV antenna for dual directions?"

> > "Highland Ham" <rfburns@allbands.net> wrote in message
> > news:i5idnZ4jCP_gtDjUnZ2dnUVZ8u2dnZ2d@pipex.net...
> >
> >
> >> If I had a neighbour close by I would be happy to share my connection.
> >>
> >> Frank GM0CSZ / KN6WH
> >
> > Nice idea in theory, bad idea in practice, since you can't monitor his
PC.
> > If something illegal goes on from his computer, your IP address will be
> > logged as the source.
> >
> So?

Criminal penalties apply to computer crimes that could be committed via such a shared connection. Notable are the downloading of child pornography (a five-year federal felony in the US) and the misuse of a "zombie" computer for conducting a distributed denial-of-service attack or for sending spam.

In these and other computer crimes, the shared connection is via the subscriber's IP, no matter where the misused computer is located -- in the house, in the barn, in the street, next door, etc. The authorities want to talk to YOU!

Even if the person with whom you share your connection is a model citizen, you still face a risk of misuse out of his sight.

I hope I've made my viewpoint clear.

210. Re: Sharing Internet Connection

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-27 07:10:04 UTC
From: Esther & Fester Bestertester <not@me.really>
Message-ID: <0001HW.C5CCD1CC00662A16B01AD9AF@news.sf.sbcglobal.net>
Source record: 3163
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

> I hope I've made my viewpoint clear.

Can you please take this to another thread of its own?

211. Re: Sharing Internet Connection

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-27 08:29:29 UTC
From: Rob <nomail@example.com>
Message-ID: <slrngqf939.1rqr.nomail@xs7.xs4all.nl>
Source record: 3164
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Esther & Fester Bestertester <not@me.really> wrote:
>> I hope I've made my viewpoint clear.
>
> Can you please take this to another thread of its own?

Again??? What do you want?
It has been taken to another thread and still you repeat your comment.

212. Re: Sharing Internet Connection

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-27 08:47:37 UTC
From: Esther & Fester Bestertester <not@me.really>
Message-ID: <0001HW.C5CCE8A9006B85F9B01AD9AF@news.sf.sbcglobal.net>
Source record: 3165
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

> Again??? What do you want?

Relax...

There have been 4 OT posts. Each poster apparently needs a little help...

> It has been taken to another thread and still you repeat your comment.

Can you please take this to another thread of its own?

(Sorry, I couldn't resist.)

213. Re: Sharing Internet Connection

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-27 08:49:41 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <z0XW9BGlk6pJFwzc@g3ohx.demon.co.uk>
Source record: 3166
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In message <slrngqf939.1rqr.nomail@xs7.xs4all.nl>, Rob
<nomail@example.com> writes
>Esther & Fester Bestertester <not@me.really> wrote:
>>> I hope I've made my viewpoint clear.
>>
>> Can you please take this to another thread of its own?
>
>Again??? What do you want?
>It has been taken to another thread and still you repeat your comment.

No it hasn't. The original thread, 'Hack a DTV antenna for dual
directions?' has been hijacked, and changed to 'Sharing Internet
Connection'.
--
Ian

214. Re: Sharing Internet Connection

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-27 08:51:24 UTC
From: Rob <nomail@example.com>
Message-ID: <slrngqfacb.1rqr.nomail@xs7.xs4all.nl>
Source record: 3167
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Esther & Fester Bestertester <not@me.really> wrote:
>> Again??? What do you want?
>
> Relax...
>
> There have been 4 OT posts. Each poster apparently needs a little help...

You have been replying "take it to another thread" on a post that already
has changed the subject.
When you don't consider that another thread, pity for you.

215. Re: Sharing Internet Connection

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-27 08:53:56 UTC
From: Rob <nomail@example.com>
Message-ID: <slrngqfah4.1rqr.nomail@xs7.xs4all.nl>
Source record: 3168
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

```
Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote:
> In message <slrngqf939.1rqr.nomail@xs7.xs4all.nl>, Rob
> <nomail@example.com> writes
>>Esther & Fester Bestertester <not@me.really> wrote:
>>>> I hope I've made my viewpoint clear.
>>>
>>> Can you please take this to another thread of its own?
>>
>>Again??? What do you want?
>>It has been taken to another thread and still you repeat your comment.
>
> No it hasn't. The original thread, 'Hack a DTV antenna for dual
> directions?' has been hijacked, and changed to 'Sharing Internet
> Connection'.

So now it is a new thread "Sharing Internet Connection". That is
what was requested. No need to put more comments about changing thread
into there.
```

216. Hijacking Newsgroup Threads

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-27 09:05:47 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <6UEUF5Hrz6pJFwQ7@g3ohx.demon.co.uk>
Source record: 3169
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

```
In message <slrngqfah4.1rqr.nomail@xs7.xs4all.nl>, Rob
<nomail@example.com> writes
>Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote:
>> In message <slrngqf939.1rqr.nomail@xs7.xs4all.nl>, Rob
>> <nomail@example.com> writes
>>>Esther & Fester Bestertester <not@me.really> wrote:
>>>>> I hope I've made my viewpoint clear.
>>>>
>>>> Can you please take this to another thread of its own?
>>>
>>>Again??? What do you want?
>>>It has been taken to another thread and still you repeat your comment.
>>
>> No it hasn't. The original thread, 'Hack a DTV antenna for dual
>> directions?' has been hijacked, and changed to 'Sharing Internet
>> Connection'.
>
>So now it is a new thread "Sharing Internet Connection". That is
>what was requested. No need to put more comments about changing thread
>into there.

Don't you absolutely hate people who hijack threads by changing the
subject?
--
Ian
```

217. Re: Hijacking Newsgroup Threads

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-27 09:48:19 UTC
From: Rob <nomail@example.com>
Message-ID: <slrngqfdn3.1thn.nomail@xs7.xs4all.nl>
Source record: 3170
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

```
Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote:
> In message <slrngqfah4.1rqr.nomail@xs7.xs4all.nl>, Rob
> <nomail@example.com> writes
>>Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote:
>>> In message <slrngqf939.1rqr.nomail@xs7.xs4all.nl>, Rob
>>> <nomail@example.com> writes
>>>>Esther & Fester Bestertester <not@me.really> wrote:
>>>>> I hope I've made my viewpoint clear.
>>>>
>>>> Can you please take this to another thread of its own?
>>>>
>>>>Again??? What do you want?
>>>>It has been taken to another thread and still you repeat your comment.
>>>
>>> No it hasn't. The original thread, 'Hack a DTV antenna for dual
>>> directions?' has been hijacked, and changed to 'Sharing Internet
>>> Connection'.
>>
>>So now it is a new thread "Sharing Internet Connection". That is
>>what was requested. No need to put more comments about changing thread
>>into there.
>
> Don't you absolutely hate people who hijack threads by changing the
> subject?

Get a newsreader that threads by subject, and be done with it.
```

218. Newsreaders that thread by subject

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-27 10:09:02 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <aHBsRMM+u7pJFwli@g3ohx.demon.co.uk>
Source record: 3171
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

```
In message <slrngqfdn3.1thn.nomail@xs7.xs4all.nl>, Rob
<nomail@example.com> writes
>Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote:
>> In message <slrngqfah4.1rqr.nomail@xs7.xs4all.nl>, Rob
>> <nomail@example.com> writes
>>>Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote:
>>>> In message <slrngqf939.1rqr.nomail@xs7.xs4all.nl>, Rob
>>>> <nomail@example.com> writes
>>>>>Esther & Fester Bestertester <not@me.really> wrote:
>>>>>>> I hope I've made my viewpoint clear.
>>>>>>
>>>>>> Can you please take this to another thread of its own?
>>>>>
>>>>>Again??? What do you want?
>>>>>It has been taken to another thread and still you repeat your comment.
>>>>
>>>> No it hasn't. The original thread, 'Hack a DTV antenna for dual
>>>> directions?' has been hijacked, and changed to 'Sharing Internet
>>>> Connection'.
>>>
>>>So now it is a new thread "Sharing Internet Connection". That is
>>>what was requested. No need to put more comments about changing thread
>>>into there.
>>
>> Don't you absolutely hate people who hijack threads by changing the
>> subject?
>
>Get a newsreader that threads by subject, and be done with it.

I thought that mine did!

When the tree is collapsed, the subject is 'Hack a DTV antenna for dual
directions?' It's only when you expand it, and look 66 postings down the
tree, that you find that some idiot has changed the subject to
'Newsreaders that thread by subject'

Are there any news readers which allow you to rearrange news posts,
which have already been received, into a separate, new thread, and then
have further incoming posts automatically routed there?
--
Ian
```

219. Re: Hijacking Newsgroup Threads

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-27 10:13:49 UTC
From: HighlandObserver@gmail.com
Message-ID: <96ffq4hul44eh0rfc4gp12ilv6ouq8bk65@4ax.com>
Source record: 3172

On 27 Feb 2009 09:48:19 GMT, Rob <nomail@example.com> wrote:

>Get a newsreader that threads by subject, and be done with it.

Get a GSOH

220. Re: Newsreaders that thread by subject

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-27 10:27:59 UTC
From: Rob <nomail@example.com>
Message-ID: <slrngqfg1f.1ulv.nomail@xs7.xs4all.nl>
Source record: 3173
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote:
> Are there any news readers which allow you to rearrange news posts,
> which have already been received, into a separate, new thread, and then
> have further incoming posts automatically routed there?

My newsreader, slrn, does just that. It is starting a new thread at
toplevel everytime you change the subject.

221. Re: Newsreaders that thread by subject

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-27 10:47:22 UTC
From: Ian Wade <g3nrw@yahoo.co.uk>
Message-ID: <vh0EqlN6S8pJFwQn@ntlworld.com>
Source record: 3174
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

From: Rob <nomail@example.com>
Date: Fri, 27 Feb 2009 Time: 10:27:59

>Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote:
>> Are there any news readers which allow you to rearrange news posts,
>> which have already been received, into a separate, new thread, and then
>> have further incoming posts automatically routed there?
>
>My newsreader, slrn, does just that. It is starting a new thread at
>toplevel everytime you change the subject.

Your newsreader is broken -- it doesn't understand threads. Here are all
the contributors to the "Hack a DTV antenna for dual directions?"
thread:

~~~~~~
References: <0001HW.C5C7191C011A1E44B01AD9AF@news.sf.sbcglobal.net>
<ebd65c07-ff25-4c6f-a49a-2b4d6eeab366@e24g2000vbe.googlegroups.com>
<0001HW.C5C8697A0168F3DAB01AD9AF@news.sf.sbcglobal.net>
<1a221a01-4140-4008-bfc1-9783de97908d@f24g2000vbf.googlegroups.com>
<0001HW.C5C9B7B001B74859B04379AF@news.sf.sbcglobal.net>
<1uz374a3sHpJFwj5@g3ohx.demon.co.uk>
<d36b413a-da35-430c-b8c2-a34816a62fce@v19g2000yqn.googlegroups.com>
<i5idnZ4jCP_gtDjUnZ2dnUVZ8u2dnZ2d@pipex.net>
<Oyopl.282$Rg3.263@newsfe17.iad>
<3oqdnSWyisq7DTvUnZ2dnUVZ_qvinZ2d@earthlink.com>
<QpLpl.36525$g63.20199@newsfe24.iad>
<0001HW.C5CCD1CC00662A16B01AD9AF@news.sf.sbcglobal.net>
<slrngqf939.1rqr.nomail@xs7.xs4all.nl>
<z0XW9BGlk6pJFwzc@g3ohx.demon.co.uk>
<slrngqfah4.1rqr.nomail@xs7.xs4all.nl>
<6UEUF5Hrz6pJFwQ7@g3ohx.demon.co.uk>
<slrngqfdn3.1thn.nomail@xs7.xs4all.nl>
<aHBsRMM+u7pJFwli@g3ohx.demon.co.uk>
~~~~~~

They are all in the *same* thread, even though a couple people changed
the Subject on the way.

In the world of Usenet groups, changing the Subject line does *not*
start a new thread.

--
73
Ian, G3NRW

222. Re: Sharing Internet Connection

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-27 11:12:29 UTC
From: Highland Ham <rfburns@allbands.net>
Message-ID: <XMydnYUINNcDVzrUnZ2dnUVZ8omWnZ2d@pipex.net>
Source record: 3175
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Sal M. Onella wrote:
> "dave" <dave@dave.dave> wrote in message
> news:3oqdnSWyisq7DTvUnZ2dnUVZ_qvinZ2d@earthlink.com...
>
> which was OT in thread "Hack a DTV antenna for dual directions?"
>
>>> "Highland Ham" <rfburns@allbands.net> wrote in message
>>> news:i5idnZ4jCP_gtDjUnZ2dnUVZ8u2dnZ2d@pipex.net...
>>>
>>>
>>>> If I had a neighbour close by I would be happy to share my connection.
>>>>
>>>> Frank GM0CSZ / KN6WH
>>> Nice idea in theory, bad idea in practice, since you can't monitor his
> PC.
>>> If something illegal goes on from his computer, your IP address will be
>>> logged as the source.
>>>
>> So?
>
> Criminal penalties apply to computer crimes that could be committed via such
> a shared connection. Notable are the downloading of child pornography (a
> five-year federal felony in the US) and the misuse of a "zombie" computer
> for conducting a distributed denial-of-service attack or for sending spam.
>
> In these and other computer crimes, the shared connection is via the
> subscriber's IP, no matter where the misused computer is located -- in the
> house, in the barn, in the street, next door, etc. The authorities want to
> talk to YOU!
>
> Even if the person with whom you share your connection is a model citizen,
> you still face a risk of misuse out of his sight.
>
> I hope I've made my viewpoint clear.
==========
Indeed you have. In the end it all boils down to : Trust thy neigbour.
Also ,there is no life without risk.

Frank GM0CSZ / KN6WH

223. Re: Newsreaders that thread by subject

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-27 11:18:00 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <9m01JVWov8pJFwyV@g3ohx.demon.co.uk>
Source record: 3176
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In message <vh0EqlN6S8pJFwQn@ntlworld.com>, Ian Wade <g3nrw@yahoo.co.uk>
writes
>>>
>>
>
>In the world of Usenet groups, changing the Subject line does *not*
>start a new thread.
>
But maybe it depends on the news reader? I suppose it would indeed be a
neat feature if it did this!
--
Ian

224. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-27 11:34:53 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <f99b1cda-168f-4654-a1ac-afaa10afc928@j39g2000yqn.googlegroups.com>
Source record: 3177
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Feb 26, 6:31 pm, "Tio Pedro" <radioconnect...@cox.net> wrote:
> "Bill M" <radioex...@geeemail.com> wrote in message
>
> news:go4ste01r2l@news1.newsguy.com...
>
> > >> No doubt, so I don't think a wooden antenna is the final solution.
> > > Best check out how the scheme might work with scrap wood and coathangers
> > > and if that works then you could upgrade to finer materials for a more
> > > permanent solution that works in the rain.
>
> > > On the other hand it may work well for you in spite of the loss in gain.
>
> > > -Bill
>
> Wood is fine, it has been used for UHF colinears for decades....
> The trick is to have the elements supported (in contact with
> wood) at the low voltage,
> high current points. CC made a colinear back in the 60s
> that used good insulators, but had them on the high voltage
> points, which affected the antenna's performance.
>
> Pete

True enough if the design work has been do to ensure that the high
impedance points arent in contact with the wood.
In the concerned case this may not be and probably isnt true for all
frequencies concerned..

Jimmie

225. Re: WIA 'Amateur Radio' 10m FM Tcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-27 12:06:44 UTC
From: fghi544 <fghi544.3edd498@radiobanter.com>
Message-ID: <fghi544.3edd498@radiobanter.com>
Source record: 3179

'Ralph Lauren' (http://ralph-lauren-polo-shirts.blogspot.com/), a designer who let the United States-style in his hands turned into real values. Has been preoccupied with shaping the minds of the convergence of the Wild West, Indian culture, the old Hollywood feeling of "American style" is the journal of the media who were called on behalf of the "American classic" designers. In his well-operating under the 'Ralph Lauren Polo shirts' (http://ralph-lauren-polo-shirts.blogspot.com/) company is the perfect interpretation of American cowboy casual style. Knitted T-shirts are probably the most successful among the polo shirts. Polo shirts are the creator of American fashion designers Ralph Lauren (Ralph Lauren), Ralph Lauren Polo shirts, whether it is being loaded or casual wear, has a modern elegance, the First 'Ralph Lauren Polo shirts' (http://ralph-lauren-polo-shirts.blogspot.com/) design cool, neutral, slender lines appeared hearty and vibrant; with some sexy in a simple style to show their strong American style.

--
fghi544

226. Re: Newsreaders that thread by subject

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-27 13:42:37 UTC
From: Rob <nomail@example.com>
Message-ID: <slrngqfred.24a1.nomail@xs7.xs4all.nl>
Source record: 3178
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Ian Wade <g3nrw@yahoo.co.uk> wrote:
> They are all in the *same* thread, even though a couple people changed
> the Subject on the way.
>
> In the world of Usenet groups, changing the Subject line does *not*
> start a new thread.

Then stop the discussion about starting a new thread, as that just isn't
going to happen.

227. Re: Sharing Internet Connection

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-28 04:41:44 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <dg3ql.51296$uG1.45551@newsfe16.iad>
Source record: 3180
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"Highland Ham" <rfburns@allbands.net> wrote in message
news:XMydnYUINNcDVzrUnZ2dnUVZ8omWnZ2d@pipex.net...

> In the end it all boils down to : Trust thy neigbour.
> Also ,there is no life without risk.
>
> Frank GM0CSZ / KN6WH

Glory be to God! I failed absolutely!

No, no NO! What I said was: Do NOT trust your neighbor with your Internet connection. He is not as concerned with keeping you out of prison as you would want him to be if you are a freedom-loving soul. His misdeeds (or the misdeeds of people who have access to his computer, connected wirelessly to your 802.11 Internet connection) will be blamed on you. He does the deed -- you get the beating.

If there is no life without risk, go down to the packing plant and stick your dick in the pickle slicer. Maybe nothing will happen.

;-)
"Sal"
(KD6VKW, a Lowland Ham -- 458 ft AMSL and hoping for not very much sea level rise)

228. Re: Sharing Internet Connection

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-28 05:04:16 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <kB3ql.19874$Rg3.4451@newsfe17.iad>
Source record: 3181
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"Rob" <nomail@example.com> wrote in message
news:slrngqfah4.1rqr.nomail@xs7.xs4all.nl...
> Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote:
> > In message <slrngqf939.1rqr.nomail@xs7.xs4all.nl>, Rob
> > <nomail@example.com> writes
> >>Esther & Fester Bestertester <not@me.really> wrote:
> >>>> I hope I've made my viewpoint clear.
> >>>
> >>> Can you please take this to another thread of its own?
> >>
> >>Again??? What do you want?
> >>It has been taken to another thread and still you repeat your comment.
> >
> > No it hasn't. The original thread, 'Hack a DTV antenna for dual
> > directions?' has been hijacked, and changed to 'Sharing Internet
> > Connection'.
>
> So now it is a new thread "Sharing Internet Connection". That is
> what was requested. No need to put more comments about changing thread
> into there.

229. Re: Sharing Internet Connection

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-28 05:19:28 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <o35ql.33570$EO2.4665@newsfe04.iad>
Source record: 3182
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"Rob" <nomail@example.com> wrote in message
news:slrngqfacb.1rqr.nomail@xs7.xs4all.nl...
> Esther & Fester Bestertester <not@me.really> wrote:
> >> Again??? What do you want?
> >
> > Relax...
> >
> > There have been 4 OT posts. Each poster apparently needs a little
help...
>
> You have been replying "take it to another thread" on a post that already
> has changed the subject.
> When you don't consider that another thread, pity for you.

Seriously, do the headers retain a record of a past thread when the subject
line is changed? I ask because I do not recall whether I did that or
whether I went to the <File> menu and initiated a <New News Message>.

When I saw the complaint about being off-topic, I really, truly, sincerely
wanted to comply with general NG etiquette (and I thought I was doing so).

I already Googled for NG etiquette and got a lot of stuff, nothing
conclusive on this subject. URLs, please. If I do wrong, I need to undo
it.

"Sal"

230. Re: Sharing Internet Connection

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-28 08:31:38 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <LD6ql.29216$Hy7.14031@newsfe25.iad>
Source record: 3183
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"Sal M. Onella" <salmonella@food.poisoning.org> wrote in message
news:o35ql.33570$EO2.4665@newsfe04.iad...

>
> Seriously, do the headers retain a record of a past thread when the
subject
> line is changed? I ask because I do not recall whether I did that or
> whether I went to the <File> menu and initiated a <New News Message>.

Answering my own question, for some newsreaders, a change of the subject
line DOES NOT create a new thread.

Therefore, to avoid taking the "Hacking a DTV Antenna ..." thread off-topic,
I should have posted a new message. We're all still learning.

231. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-28 12:14:20 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <5bqdnYFR3-EAtzTUnZ2dnUVZ_u6dnZ2d@bright.net>
Source record: 3184
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

JIMMIE wrote:

>>
>>That's what spar varnish is for. Metal booms with the uninsulated
>>elements going through are probably more "shorted" than from wet wood!
>>When aluminum is out in the rain, it's just as wet as wood would be.
>>The water may detune it slightly. Wood can be a great choice for boom
>>material (with proper varnishing)...it would probably outlast an
>>aluminum one in a salt air environment....
>>
>>Scott
>>N0EDV- Hide quoted text -
>>
>>- Show quoted text -
>
>
> In this case the wood is being used as the feedpoint insulator.
>
> Jimmie

OK, throw on another coat of varnish if it makes you feel better...I
usually use 3 heavy, slopped on coats...I don't care about runs or beauty ;)

Scott

232. Re: Sharing Internet Connection

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-28 14:40:29 UTC
From: dave <dave@dave.dave>
Message-ID: <YKKdnf74QIZG0TTUnZ2dnUVZ_rwLAAAA@earthlink.com>
Source record: 3185
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Sal M. Onella wrote:
> "Rob" <nomail@example.com> wrote in message
> news:slrngqfacb.1rqr.nomail@xs7.xs4all.nl...
>> Esther & Fester Bestertester <not@me.really> wrote:
>>>> Again??? What do you want?
>>> Relax...
>>>
>>> There have been 4 OT posts. Each poster apparently needs a little
> help...
>> You have been replying "take it to another thread" on a post that already
>> has changed the subject.
>> When you don't consider that another thread, pity for you.
>
> Seriously, do the headers retain a record of a past thread when the subject
> line is changed? I ask because I do not recall whether I did that or
> whether I went to the <File> menu and initiated a <New News Message>.
>
> When I saw the complaint about being off-topic, I really, truly, sincerely
> wanted to comply with general NG etiquette (and I thought I was doing so).
>
> I already Googled for NG etiquette and got a lot of stuff, nothing
> conclusive on this subject. URLs, please. If I do wrong, I need to undo
> it.
>
> "Sal"
>
>
This thread was earlier called: Hack a DTV antenna for dual direction

233. Re: Sharing Internet Connection

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-28 16:11:24 UTC
From: dave <dave@dave.dave>
Message-ID: <mqadnS8KQIu3_zTUnZ2dnUVZ_gSWnZ2d@earthlink.com>
Source record: 3186
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Sal M. Onella wrote:
> "Sal M. Onella" <salmonella@food.poisoning.org> wrote in message
> news:o35ql.33570$EO2.4665@newsfe04.iad...
>
>
>> Seriously, do the headers retain a record of a past thread when the
> subject
>> line is changed? I ask because I do not recall whether I did that or
>> whether I went to the <File> menu and initiated a <New News Message>.
>
> Answering my own question, for some newsreaders, a change of the subject
> line DOES NOT create a new thread.
>
> Therefore, to avoid taking the "Hacking a DTV Antenna ..." thread off-topic,
> I should have posted a new message. We're all still learning.
>
>
I'd use Thunderbird (as opposed to MS Outlook). You can see a history
of a thread with a single click.

234. An idea for s source for o,scope deflection amplifiers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-02-28 20:16:10 UTC
From: N9WOS <Don't@bug.me>
Message-ID: <GYgql.13366$W06.8172@flpi148.ffdc.sbc.com>
Source record: 3187

The hardest part to build on an oscilloscope (while still maintaining bandwidth) is the final deflection amplifiers.
Something had occurred to me a little while ago. There is a readily available supply of chips that will do the job in a specific product. That product is CRT SVGA monitors.

The video amplifiers that drive the grids of the electron guns.

Normal supply voltage is 80 to 100V.
Normal output swing is 10 to 75V or 10 to 95V
Normal signal input voltage 0 to 5V
They are capable of driving 8pf loads which is close to the value of a deflection plate.
Output response times are 10us or faster. Some of the newest are down to 2.5us.
Corresponding bandwidth is DC to 50 or 200MHZ
They normally come in a self contained package that contains three amplifiers.

Since most scope most scope tubes take less than 80 volts per plate for full deflection (all the ones i have seen), then they make a great deflection amplifier.

They would be great for upgrading an old tube type scope up to a solid state 100Mhz unit. The rest of the amplifier chain would be easy to built. They would also be great for building a scope from scratch. Remember to keep lead lengths short, and use shielded interconnect cables, because at 100Mhz it will oscillate if it can hear it's self.

That is what I am currently doing to an old EICO scope. I already have the vertical amplifier in place. It uses two sections of a VPS10S. For The horizontal amplifier I am going with discrete components, because it doesn't need to be as high of bandwidth. I have got the horizontal amplifier built, and I just need to get it mounted.

The next stage is the amplifier stages between the input, and deflection circuits. They are all going to be 5V rail to ground. There will be a couple +10 and -5V point in the circuit for level transition, and signal inversions. And I have to build the horizontal oscillator and triggering circuits.

The only thing that has been bugging me is, what can I do with the old tube sockets. I have been trying to think of some tube circuits I could use. The only things I could think of is a high impedance input buffer. Or use a 6AL5 as a wide band RF rectifier. Or I could put in a sweep oscillator and a IF amplifier and make a rudimentary spectrum analyzer.

235. Re: An idea for s source for o,scope deflection amplifiers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-01 02:52:31 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <b486b0c7-3eb1-4af2-9e3c-377e56d3c2a7@o8g2000pre.googlegroups.com>
Source record: 3188

On Feb 28, 12:16 pm, "N9WOS" <Do...@bug.me> wrote:
> The hardest part to build on an oscilloscope (while still maintaining
> bandwidth) is the final deflection amplifiers.
> Something had occurred to me a little while ago. There is a readily
> available supply of chips that will do the job in a specific product. That
> product is CRT SVGA monitors.

...

Wow, I admire you for even thinking of tackling something like this!
You're right that the video drivers from modern fast monitors should
work fine for deflection amplifiers, perhaps with a bit of care about
frequency compensation, and so long as they have enough output to
drive your particular CRT.

On the other hand, it does seem like a LOT of work to go to
considering that you can get a really nice used analog scope for under
$100. I have an HP1715A 200MHz 2-channel scope with nice main+delayed
sweep that I need to put on ebay (or equivalent), and I seriously
doubt I'll get $100 for it.

If you do go to all the trouble to revamp your Eico (maybe the same
scope model I started with almost 50 years ago??!!), I do hope you'll
put a good triggered sweep in it, and not just a "horizontal
oscillator." It's not too difficult to make a very respectable linear
sweep with op amps and fast comparators these days. For triggering,
for example, have a look at the Analog Devices ADCMP02 and its
siblings: fast, built-in hysteresis... I'm using one in the input of
a counter, and it goes to 100MHz easily for low level inputs, and to
well over 200MHz if I jack up the input a bit.

Cheers,
Tom

236. Re: An idea for s source for o,scope deflection amplifiers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-01 04:41:55 UTC
From: N9WOS <Don't@bug.me>
Message-ID: <pmoql.23823$ZP4.9001@nlpi067.nbdc.sbc.com>
Source record: 3189

>On the other hand, it does seem like a LOT of work to go to
>considering that you can get a really nice used analog scope for under
>$100. I have an HP1715A 200MHz 2-channel scope with nice main+delayed
>sweep that I need to put on ebay (or equivalent), and I seriously
>doubt I'll get $100 for it.

I have the old scope laying around so why not? And almost everything I am using in it is salvaged parts. Including capacitors, transistors, transformers, and the video chips in question. I will probably have under 10 dollars in it after I am done. (That includes the $5 I paid for the scope a few years ago.)

>If you do go to all the trouble to revamp your Eico (maybe the same
>scope model I started with almost 50 years ago??!!), I do hope you'll
>put a good triggered sweep in it, and not just a "horizontal
>oscillator." It's not too difficult to make a very respectable linear
>sweep with op amps and fast comparators these days. For triggering,
>for example, have a look at the Analog Devices ADCMP02 and its
>siblings: fast, built-in hysteresis... I'm using one in the input of
>a counter, and it goes to 100MHz easily for low level inputs, and to
>well over 200MHz if I jack up the input a bit.

For the sweep, I was planning on using a transistor as a constant current source to charge the capacitor for a nice linear sweep. And use JK or D flip flops for trigger and state control. The flip flops would be triggered and reset by comparators.

The clock input to the flip flop will be feed from a comparator and used as the trigger input. When the capacitor reaches a certain value (end of sweep) a comparator would reset the flip flop. When the flip flop rests, it will discharge the cap. After a dwell time (cap discharge period), the data input to the flip flop will be brought high. The next clock input (trigger) will set the flip flop and the cap will start charging which commences the sweep.

I should be able to do the sweep and triggering circuit with a dual D flip flop, a quad comparator, and a transistor with some other components. with a comparator and D flip flop to spare.

237. Re: Sharing Internet Connection

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-01 07:42:31 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <I%qql.51852$cI2.35948@newsfe09.iad>
Source record: 3190
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"dave" <dave@dave.dave> wrote in message
news:YKKdnf74QIZG0TTUnZ2dnUVZ_rwLAAAA@earthlink.com...

< snip >

> This thread was earlier called: Hack a DTV antenna for dual direction.

Yes, and I screwed it up by changing the <Subject>, thinking I was creating
a new thread. However it doesn't always happen that way.

It went off topic, I followed and was called on it. The attempted "fix"
turned out to be my screw-up.

238. If a mosfet works fine than why not use a thyristor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-01 08:53:11 UTC
From: "D. v. Bilt" <not@here.com>
Message-ID: <49aa4d34$0$31185$6d4158fb@reader.xsnews.nl>
Source record: 3191

It just crossed my mind. If a mosfet used in switch mode should or
could a thyristor also work. Do manufacturers make them already
for high frequencies ?
Because a power mosfet is far too expensive to hobby around with.

239. Re: If a mosfet works fine than why not use a thyristor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-01 10:14:23 UTC
From: geek <geek@localhost.localdomain>
Message-ID: <pan.2009.03.01.10.14.23.123127@localhost.localdomain>
Source record: 3192

Hi,

Early TV's used them in their power supplies. Some used a SCR, others used fancier devices.

MOSFET's give a higher efficiency and are a lot easier to drive, so they were pretty much abandoned.

Cheers!

240. Re: If a mosfet works fine than why not use a thyristor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-01 10:50:07 UTC
From: Bob <biascomms@invalid.inv>
Message-ID: <70v7hqFi5e1lU1@mid.individual.net>
Source record: 3193

D. v. Bilt wrote:

> It just crossed my mind. If a mosfet used in switch mode should or
> could a thyristor also work. Do manufacturers make them already
> for high frequencies ?

I've done it in the past, but they're not really capable of high frequencies
(mine was at 173 kHz).

> Because a power mosfet is far too expensive to hobby around with.

What? The IRF730 (for example) is capable of 50 Watts at up to 25 MHz for
very little drive, and costs under $1!

Bob

241. Re: If a mosfet works fine than why not use a thyristor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-01 16:59:26 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <KIadnSfFbrZyIzfUnZ2dnUVZ_ozinZ2d@bright.net>
Source record: 3194

Bob wrote:

>
>
>> Because a power mosfet is far too expensive to hobby around with.
>
>
> What? The IRF730 (for example) is capable of 50 Watts at up to 25 MHz for
> very little drive, and costs under $1!
>
> Bob
>
Hams is cheap! ;) If it ain't free, it's too expensive to bother with ;)

Scott
N0EDV

242. Re: If a mosfet works fine than why not use a thyristor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-01 17:37:03 UTC
From: "D. v. Bilt" <not@here.com>
Message-ID: <49aac7ea$0$17425$6d4158fb@reader.xsnews.nl>
Source record: 3195

"Bob" <biascomms@invalid.inv>

>> Because a power mosfet is far too expensive to hobby around with.
>
> What? The IRF730 (for example) is capable of 50 Watts at up to 25 MHz for
> very little drive, and costs under $1!
>
> Bob

Agreed. But now the 150 W and up versions for 2 meters..

b.t.w. since when did the u.s. agree to go metric ? (1888?) not only for hams.

243. Re: If a mosfet works fine than why not use a thyristor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-01 17:47:19 UTC
From: N9WOS <Don't@bug.me>
Message-ID: <JSzql.13409$W06.5702@flpi148.ffdc.sbc.com>
Source record: 3196

"D. v. Bilt" <not@here.com> wrote in message
news:49aa4d34$0$31185$6d4158fb@reader.xsnews.nl...
>
>
> It just crossed my mind. If a mosfet used in switch mode should or
> could a thyristor also work. Do manufacturers make them already
> for high frequencies ?
> Because a power mosfet is far too expensive to hobby around with.

The main problem I see is the fact that they are generally designed to lock into the on state, until the load current drops to zero. For a switch mode power supply, the switching device has to be able to break full current. If you used an SCR it would lock on, and things would melt under most conditions.

The only switching circuits they can be used in is circuits that are designed to drop to zero on it's own for the SCR to unlatch. Like AC load control, where the sine wave drops to zero at a 120 times a second.

Like the old computer line printers. They had a bank of SCRs driving the printing heads. The inductive rebound would bring the current to zero and allow the SCR to unlatch after triggering. But If one stuck on, you better shut the system down quick, or the thing was going to burst into flame.

244. Re: If a mosfet works fine than why not use a thyristor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-01 21:29:35 UTC
From: JIMMIE <jimmie68@gmail.com>
Message-ID: <1504250a-5d35-4dc0-b59f-1d0c720fe95f@d19g2000yqb.googlegroups.com>
Source record: 3197

On Mar 1, 3:53 am, "D. v. Bilt" <n...@here.com> wrote:
> It just crossed my mind. If a mosfet used in switch mode should or
> could a thyristor also work. Do manufacturers make them already
> for high frequencies ?
> Because a power mosfet is far too expensive to hobby around with.

They are relaatively slow, You might could build a VLF transmitter
using them.

Jimmie

245. Re: An idea for s source for o,scope deflection amplifiers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-01 23:35:44 UTC
From: patrick jankowiak <eccm@swbell.net>
Message-ID: <bZEql.17426$YU2.8900@nlpi066.nbdc.sbc.com>
Source record: 3198

N9WOS wrote:
>> On the other hand, it does seem like a LOT of work to go to
>> considering that you can get a really nice used analog scope for under
>> $100. I have an HP1715A 200MHz 2-channel scope with nice main+delayed
>> sweep that I need to put on ebay (or equivalent), and I seriously
>> doubt I'll get $100 for it.
>
> I have the old scope laying around so why not? And almost everything I am
> using in it is salvaged parts. Including capacitors, transistors,
> transformers, and the video chips in question. I will probably have under 10
> dollars in it after I am done. (That includes the $5 I paid for the scope a
> few years ago.)
>
>> If you do go to all the trouble to revamp your Eico (maybe the same
>> scope model I started with almost 50 years ago??!!), I do hope you'll
>> put a good triggered sweep in it, and not just a "horizontal
>> oscillator." It's not too difficult to make a very respectable linear
>> sweep with op amps and fast comparators these days. For triggering,
>> for example, have a look at the Analog Devices ADCMP02 and its
>> siblings: fast, built-in hysteresis... I'm using one in the input of
>> a counter, and it goes to 100MHz easily for low level inputs, and to
>> well over 200MHz if I jack up the input a bit.
>
> For the sweep, I was planning on using a transistor as a constant current
> source to charge the capacitor for a nice linear sweep. And use JK or D flip
> flops for trigger and state control. The flip flops would be triggered and
> reset by comparators.
>
> The clock input to the flip flop will be feed from a comparator and used as
> the trigger input. When the capacitor reaches a certain value (end of sweep)
> a comparator would reset the flip flop. When the flip flop rests, it will
> discharge the cap. After a dwell time (cap discharge period), the data input
> to the flip flop will be brought high. The next clock input (trigger) will
> set the flip flop and the cap will start charging which commences the sweep.
>
> I should be able to do the sweep and triggering circuit with a dual D flip
> flop, a quad comparator, and a transistor with some other components. with a
> comparator and D flip flop to spare.
>
>

Thanks for posting this interesting topic! I thought no one else cared
about CRTs. I've been messing with scopes and CRTs a long time. It's
always fun. I always see the 3" tubes built into people's projects,

running on 1-3KV. They are never very bright. I like the larger 5" ones of recent manufacture (recent being a relative term). Half the fun is doing it yourself. Even the HV supply is a fun project when you get into serious scope tubes. In general, it will take at least 6KV to get a real bright one going. - but the tube has to be able to take it! In case anyone needs a good CRT, there are many here, for cheap, and quite a few HP or TEK types:
http://www.magnetosphere.net/

PJ

246. Re: If a mosfet works fine than why not use a thyristor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-02 02:16:56 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <SrGdnaG7kIAI3DbUnZ2dnUVZ_t3inZ2d@giganews.com>
Source record: 3199

"D. v. Bilt" <not@here.com> wrote in message
news:49aa4d34$0$31185$6d4158fb@reader.xsnews.nl...
>
>
> It just crossed my mind. If a mosfet used in switch mode should or
> could a thyristor also work.

Yes they would however the circuit complexity is higher. Other than the
frequency issue the problem is turning off the SCR. This requires some
careful design techniques to commutate the SCR off once it is turned on.
That's where the complexity comes in to play. Various methods are used to
accomplish this. Also SCR's have other problems too such as turn-on di/dt
limits, dv/dt limits at turn off (which can cause retriggering), recovery
time requirements, high recovered charge etc making snubber circuit design a
challenge.

http://nptel.iitm.ac.in/courses/Webcourse-contents/IIT%20Kharagpur/Power%20Electronics/PDF
/L-19(SSG)(PE)%20((EE)NPTEL)%20.pdf

http://forum.vtu.ac.in/~edusat/Prog6/pelec/tka/Thyristor-Commutation-Techniques.ppt#113

--
Regards,
Leland C. Scott
KC8LDO

Do manufacturers make them already
> for high frequencies ?
> Because a power mosfet is far too expensive to hobby around with.

247. Re: An idea for s source for o,scope deflection amplifiers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-02 02:38:47 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <1098f503-293c-40fd-a0c2-6abf9b9539fa@h20g2000yqn.googlegroups.com>
Source record: 3200

Hey OM:

I remember my days at RETS electronics schools we had a instructor his
name was Armstrong the cousin of the inventor of FM. In his class you
got to build a 100Mhz tube only scope, you bought all the parts from
him, nice scam, including the CRT, he made the CRT's himself from
scratch. I didn't get him as an instructor so I missed out on a great
deal. We got to play with computers the relay tube type. When I
graduated, Armstrong finally broke down and put an FET into his scope.
I have to add that his scope was flat + - 3db all the way out to
100MHZ. dual trace with a triggered sweep.
Don't forget your astigmatism

73 OM
de n8zu

On Feb 28, 3:16 pm, "N9WOS" <Do...@bug.me> wrote:
> The hardest part to build on an oscilloscope (while still maintaining
> bandwidth) is the final deflection amplifiers.
> Something had occurred to me a little while ago. There is a readily
> available supply of chips that will do the job in a specific product. That
> product is CRT SVGA monitors.
>
> The video amplifiers that drive the grids of the electron guns.
>
> Normal supply voltage is 80 to 100V.
> Normal output swing is 10 to 75V or 10 to 95V
> Normal signal input voltage 0 to 5V
> They are capable of driving 8pf loads which is close to the value of a
> deflection plate.
> Output response times are 10us or faster. Some of the newest are down to
> 2.5us.
> Corresponding bandwidth is DC to 50 or 200MHZ
> They normally come in a self contained package that contains three
> amplifiers.
>
> Since most scope most scope tubes take less than 80 volts per plate for full
> deflection (all the ones i have seen), then they make a great deflection
> amplifier.
>
> They would be great for upgrading an old tube type scope up to a solid state
> 100Mhz unit. The rest of the amplifier chain would be easy to built. They
> would also be great for building a scope from scratch. Remember to keep lead
> lengths short, and use shielded interconnect cables, because at 100Mhz it
> will oscillate if it can hear it's self.

>
> That is what I am currently doing to an old EICO scope. I already have the
> vertical amplifier in place. It uses two sections of a VPS10S. For The
> horizontal amplifier I am going with discrete components, because it doesn't
> need to be as high of bandwidth. I have got the horizontal amplifier built,
> and I just need to get it mounted.
>
> The next stage is the amplifier stages between the input, and deflection
> circuits. They are all going to be 5V rail to ground. There will be a couple
> +10 and -5V point in the circuit for level transition, and signal
> inversions. And I have to build the horizontal oscillator and triggering
> circuits.
>
> The only thing that has been bugging me is, what can I do with the old tube
> sockets. I have been trying to think of some tube circuits I could use. The
> only things I could think of is a high impedance input buffer. Or use a 6AL5
> as a wide band RF rectifier. Or I could put in a sweep oscillator and a IF
> amplifier and make a rudimentary spectrum analyzer.

248. Re: If a mosfet works fine than why not use a thyristor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-02 18:25:13 UTC
From: JIMMIE <jimmie68@gmail.com>
Message-ID: <eb285b6d-bc54-440f-820c-09ddbbff79d5@a39g2000yqc.googlegroups.com>
Source record: 3101

On Mar 1, 12:37 pm, "D. v. Bilt" <n...@here.com> wrote:
> "Bob" <biasco...@invalid.inv>
>
> >>   Because a power mosfet is far too expensive to hobby around with.
>
> > What? The IRF730 (for example) is capable of 50 Watts at up to 25 MHz for
> > very little drive, and costs under $1!
>
> > Bob
>
>   Agreed. But now the 150 W and up versions for 2 meters..
>
>   b.t.w. since when did the u.s. agree to go metric ? (1888?) not only for hams.

I wonder what the cost would be on an SCR that oprates at 150 Mhz.

Jimmie

249. #Re: Sharing Internet Connection

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-02 18:54:58 UTC
From: Stray Dog <sdog2008@sdf.lonestar.org>
Message-ID: <Pine.NEB.4.64.0903021853010.26935@sdf.lonestar.org>
Source record: 3102
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Don't feed the trolls, don't be a troll.

Some trolls like to think they have a right to be: netcop, self-appointed censors, judges-juries-executioners, etc.

On Fri, 27 Feb 2009, Esther & Fester Bestertester wrote:

> Date: Fri, 27 Feb 2009 00:47:37 -0800
> From: Esther & Fester Bestertester <not@me.really>
> Newsgroups: rec.radio.amateur.antenna, rec.radio.amateur.homebrew,
> rec.radio.amateur.misc
> Subject: Re: Sharing Internet Connection
>
>> Again??? What do you want?
>
> Relax...
>
> There have been 4 OT posts. Each poster apparently needs a little help...
>
>> It has been taken to another thread and still you repeat your comment.
>
> Can you please take this to another thread of its own?
>
> (Sorry, I couldn't resist.)
>
>

250. #Re: Hijacking Newsgroup Threads

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-02 18:58:36 UTC
From: Stray Dog <sdog2008@sdf.lonestar.org>
Message-ID: <Pine.NEB.4.64.0903021856270.26935@sdf.lonestar.org>
Source record: 3103
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Fri, 27 Feb 2009, Ian Jackson wrote:

> Date: Fri, 27 Feb 2009 09:05:47 +0000
> From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
> Newsgroups: rec.radio.amateur.antenna, rec.radio.amateur.homebrew,
> rec.radio.amateur.misc
> Subject: Hijacking Newsgroup Threads
>
> In message <slrngqfah4.1rqr.nomail@xs7.xs4all.nl>, Rob <nomail@example.com>
> writes
>> Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote:
>>> In message <slrngqf939.1rqr.nomail@xs7.xs4all.nl>, Rob
>>> <nomail@example.com> writes
>>>> Esther & Fester Bestertester <not@me.really> wrote:
>>>>>> I hope I've made my viewpoint clear.
>>>>>
>>>>> Can you please take this to another thread of its own?
>>>>
>>>> Again??? What do you want?
>>>> It has been taken to another thread and still you repeat your comment.
>>>
>>> No it hasn't. The original thread, 'Hack a DTV antenna for dual
>>> directions?' has been hijacked, and changed to 'Sharing Internet
>>> Connection'.
>>
>> So now it is a new thread "Sharing Internet Connection". That is
>> what was requested. No need to put more comments about changing thread
>> into there.
>
> Don't you absolutely hate people who hijack threads by changing the subject?
> --
> Ian
>

FYI,

There is a sociological phenomenon called "Godwin's Law"

Here is a copy.....

Subject: How to post about Nazis and get away with it - the Godwin's Law FAQ

Archive-name: usenet/legends/godwin
Posting-Frequency: monthly
Last-Modified: October 7, 2003
Version: 1.15
URL: http://www.killfile.org/faqs/godwin.faq
Maintainer: tskirvin@killfile.org (Tim Skirvin)

Godwin's Law FAQ
-or-
"How to post about Nazis and get away with it"

One of the most famous pieces of Usenet trivia out there is "if you mention Hitler or Nazis in a post, you've automatically ended whatever discussion you were taking part in". Known as Godwin's Law, this rule of Usenet has a long and sordid history on the network - and is absolutely wrong. This FAQ is an attempt to set straight as much of the history and meaning of Godwin's Law as possible, and hopefully encourage users to invoke it a bit more sparingly. Of course, knowing Usenet, it won't do an ounce of good...

[Standard Disclaimers: this document assumes you have some basic knowledge of Usenet; if you don't, go check out news.announce.newusers for a while to gain said knowledge. Misuse of the information contained within this FAQ is not the responsibility of the author (though he's pretty confused exactly how you could misuse this information). Copyright 1999-2002, Tim Skirvin, all rights reserved, <FISH><, fnord, furrfu.]

I. The Basics
1. What is Godwin's Law?

Godwin's Law is a natural law of Usenet named after Mike Godwin (godwin@eff.org) concerning Usenet "discussions". It reads, according to the Jargon File:

As a Usenet discussion grows longer, the probability of a comparison involving Nazis or Hitler approaches one.

2. What does it mean?

It pretty much means exactly what it says - as a Usenet thread goes on, the chances of somebody or something being compared to a Nazi approach one.

3. Yes, but what does it *mean*?

Aah, now *there's* the real question.

In case your head has been buried in the sand for the last sixty years or so, the Nazis were a German political party led by Adolf Hitler that slaughtered upwards of ten million people that didn't meet their standards of "ethnic purity" and set off to conquer Europe and the world in World War II. They are generally considered the most evil group of people to live in modern times, and to compare something or someone to them is usually considered the gravest insult imaginable.

As a Usenet discussion gets longer it tends to get more heated; as more heat enters the discussion, tensions get higher and people start to insult each other over anything they can think of. Godwin's Law merely notes that, eventually, those tensions eventually cause someone to find the worst insults that come to mind - which will almost always include a Nazi comparison.

4. That still doesn't answer my question. What does it *MEAN*?

The Law is generally used on Usenet as an indicator of whether a thread has gone on too long, who's playing fair and who's just slinging mud, and who finally gets to "win" the discussion. It has, over time, become the closest thing to an impartial moderator that Usenet can get.

So, what this means in practical terms:

o If someone brings up Nazis in general conversation when it wasn't necessary or germane without it necessarily being an insult, it's probably about time for the thread to end.
o If someone brings up Nazis in general conversation when it was vaguely related but is basically being used as an insult, the speaker can be considered to be flaming and not debating.
o If someone brings up Nazis in any conversation that has been going on too long for one of the parties, it can be used as a fair excuse to end the thread and declare victory for the other side.

5. So - *WHAT DOES IT MEAN*?

Fine, fine - it means that somebody's eventually going to say something about the Nazis in any thread that lasts very long. When it happens, the thread is going to start either degenerating into a long flamewar over Nazi Germany or about Godwin's Law. Either way, the thread is effectively over, and you can safely killfile the thread and move on.

II. What does it mean?
1. Didn't we already spend the last section talking about this?

Well, yeah, but people don't seem to get the point...

2. What happens if we're actually talking about Nazis?

Then you've already invoked Godwin's Law, and the chances are that your thread isn't going to last all that much longer as a sane discussion. Them's the breaks.

That isn't to say, of course, that you can't talk about Nazis and such on Usenet - this *is* Usenet, after all, where virtually every conversation that goes on is fairly ludicrous in the first place. It's just going to take you a lot more effort to find real information out of there and to avoid getting yourself off on side-threads - which you'll eventually do regardless, but you can try to put it off.

This also applies if a thread mutates into an actual discussion of Nazis, of course.

3. What about arguing with Neo-Nazis?

Arguing with Neo-Nazis is probably the quickest path to getting Nazi invocations, because, well, they're actually accurate. Still, trying to invoke Godwin's Law near a Neo-Nazi isn't really a good idea because it's not terribly original and they'll probably get off on it anyway. Just ignore them and occasionally publish a FAQ detailing what actually happened during the Holocaust and such; arguing probably isn't going to help you.

4. How can I use Godwin's Law to my advantage?

In the proper kind of flamewar, Godwin's Law can be used as a gambit - how can you force your opponent to invoke the Law? Actually teaching these skills is tough, of course, and is best done through experience. Experience with chess and alt.flame are recommended.

5. What should I do if somebody else invokes Godwin's Law?

The obvious response is to call them on it, say "thread's over", and declare victory. This is also one of the stupidest possible responses, because it involves believing far too much in the power of a few rules that don't say exactly what you wish they said anyway. The proper response to an invocation is probably to simply followup with a message saying "Oh. I'm a Nazi? Sure. Bye" and leave, and in most cases even that much of a post is unnecessary.

6. "Hitler!" Ha! The thread is over!

Nope, doesn't work that way. Not only is it wrong to say that a thread is over when Godwin's Law is invoked anyway (Usenet threads virtually always outlive their usefulness), but long ago a corollary to the Law was proposed and accepted by Taki "Quirk" Kogama (quirk@swcp.com):

Quirk's Exception: Intentional invocation of this so-called "Nazi Clause" is ineffectual.

Sorry, folks. Nice try, though.

7. Does Godwin's Law apply in the real world?

Actually, yeah, but usually discussions in Real Life end by somebody wandering off in disgust before it can be invoked.

8. Are there any topics that lead directly to Godwin Invocations?

Well, yeah. Of course. Case's Corollary to the Law states "if the subject is Heinlein or homosexuality, the probability of a Hitler/Nazi comparison being made becomes equal to one" - but that's just an old list. Abortion and gun control debates always lead to Nazi comparisons; talk with a Libertarian for more than a few hours and he'll almost certainly bring up Nazis; book-burning is pretty much considered a sub-topic of Nazism at this point. Hell, talk about anything politically related and you'll eventually get there.

If you're really bored, a fun game to play is Six Degrees of Godwin.
Take a topic - any topic - and see how quickly you can relate it to Nazis
using legitimate topic drift methods. For example: a discussion about
computers will eventually lead to discussions of keyboards and which are
best, followed by a lot of complaining about the Windows key on 104-key
keyboards, leading to complaints about Microsoft, forcing the standard
MS-vs-government flamewar that I'm sure you're all aware of, leading to
attacks on Microsoft's "fascist" tactics by one side or another, which
will force the other side to start talking about the differences between
fascism, capitalism, and, of course, Nazism! The fun never stops!

Appendix A: The Many Forms of Godwin's Law

"You can tell when a USENET discussion is getting old when one of the
participants drags out Hitler and the Nazis."
- Richard Sexton (http://www.vrx.net/richard/) stating what would later
be known as Godwin's Law, Message-ID <21000@gryphon.COM>, 16 Oct 1989

http://groups.google.com/groups?selm=21000%40gryphon.COM&output=gplain

"Godwin's Rule of Nazi Analogies: As a Usenet discussion grows longer, the
probability of a comparison involving Nazis or Hitler approaches one."
- Mike Godwin, first article about the topic in the Google archives,
Message-ID <1991Aug18.215029.19421@eff.org>, 18 Aug 1991

http://groups.google.com/groups?selm=1991Aug18.215029.19421%40eff.org

:Godwin's Law: /prov./ [Usenet] "As a Usenet discussion grows
longer, the probability of a comparison involving Nazis or Hitler
approaches one." There is a tradition in many groups that, once
this occurs, that thread is over, and whoever mentioned the Nazis
has automatically lost whatever argument was in progress. Godwin's
Law thus practically guarantees the existence of an upper bound on
thread length in those groups.
- The Jargon File (http://www.ccil.org/jargon/)

Hitler, Nazis, nazis, and net.cops:
Warning: now that this FAQ has mentioned Hitler and Nazis, UseNet Rule #4
(also known as Godwin's Rule, after Mike Godwin of the EFF, sci.crypt, and
comp.org.eff.talk, a sometime foe of David Sternlight (q.v.) [even though it
was apparently in use, by Richard Sexton {q.v.} among others, before Mike's
1988 (?) net.advent; the "Godwin's" part seems to stem from "Rich Rosen's
Rules of Net.Debate, which I don't have a copy of]) says it will be coming to
an irrelevant and off-topic end soon. Just as there will always be newbies
("It's *always* September, *somewhere* on the net" - response to a 1993 wave
of delphi.com postings on a.f.u), there will always be people who see the net
and are repulsed because there's stuff there they don't want to see - so they
set out to make sure noone else can, either. They invariably fail, because
there are no net.cops to enforce any such rules on UseNet; in the course of
the heated flamewar that usually follows, things escalate until either Hitler
or Nazis (or both) put in an appearance, at which point the thread has
officially lost all relevance. People scream at each other a bit more, then
give up and go home. Bleah. "Keep your brains up top; don't be a net.cop."

This has mutated, in true UseNet fashion, to encompass *any* continuing thread; if you mention Hitler or Nazis out of the blue, the thread is sure to die irrelevantly soon (and, incidentally, you've lost the argument, whatever it was)... and every continuing thread on UseNet *must* contain such a reference sooner or later. Invoking Rule #4 deliberately in hopes of ending a thread, however, is doomed to failure (Quirk's Exception)...

UseNet Rules #n:
No firm info at the present time is available on just what the other UseNet Rules #n are. However, at a guess, they include:
--
Rule #nonumber: There are no hard-and-fast Rules on UseNet, only Guidelines, which are more or less strictly enforced (and differ) from group to group; this is why it's generally wise to read any group for a bit before ever posting to it.
Rule #0: *There* *is* *no* *C*b*l*. There *is*, however, a net-wide conspiracy designed solely to lead Dave Hayes (q.v.) to believe that there is a C*b*l.
Corollary: *There* *are* *no* *pods*.
Rule #9: It's *always* September, *somewhere* on the Net.
Dave Fischer's Extension: 1993 was The Year September Never Ended [so far, there doesn't seem to be much evidence he's wrong...]
Rule #17: Go not to UseNet for counsel, for they will say both `No' and `Yes' and `Try another newsgroup'.
Rule #2 (John Gilmore): "The Net interprets censorship as damage and routes around it."
Rule #108 (from the soc.motss FAQ): "What will happen to me if I read soc.motss?" "In general, nothing. (You may be informed or infuriated, of course; but that's a standard Usenet hazard.)"
Rule #666: Old alt groups never die. They don't fade away nicely, either.
Rule #7-B: There is no topic so thoroughly covered that noone will ever bring it up again.
Rule #90120: Applying your standards to someone else's post *will* result in a flamewar.
Rule #1: Spellling and grammer counts. So do grace, wit, and a sense of humor (the latter two are different), as well as a willingness to meet odd people, but these are lesser considerations.
Rule #x^2: FAQs are asked frequently. Get used to them.
Rule #29: no rational discourse can happen in a thread cross-posted to more than two newsgroups.
rule #6 (Eddie Saxe): don't post to misc.test unless you understand the consequences.
Rule #547 (Arne Adolfsen): When people know they're wrong they resort to ad hominems.
Rule #37 (Faisal Nameer Jawdat): Read the thread from the beginning, or else.
Rule #5 (Reimer's Reason): Nobody ever ignores what they should ignore on Usenet.
Rule $19.99 (Brad `Squid' Shapcott): The Internet *isn't* *free*. It just has an economy that makes no sense to capitalism.
Rule #3 ("Why 3?" "Because we felt like it"): For every opinion there is at

least one equally loud and opposing opinion; sometimes stated as:
Rule #27 (Gary Lewandowski): "In cyberspace, *everyone* can hear you scream."
And for completeness' sake:

Rule #4: (Godwin's Rule) Any off-topic mention of Hitler or Nazis will cause the thread it is mentioned in to an irrelevant and off-topic end very soon; every thread on UseNet has a constantly-increasing probability to contain such a mention.
Quirk's Exception: Intentional invocation of this so-called "Nazi Clause" is ineffectual.
Case's Corollary: If the subject is Heinlein or homosexuality, the probability of a Hitler/Nazi comparison being made becomes equal to one.
- net.legends FAQ (http://www.killfile.org/faqs/legends.html)

Appendix B: Addendums, Commentary, and Miscellaneous

1. Bentsen's Defense

For some, there is another way around Godwin's Law:

"Not this time. I know Mike Godwin. Mike Godwin is a friend of mine. Senator, you're no Mike Godwin."

This, of course, only applies to friends of Mike Godwin. The originator of this rule, Earl Cooley III (shiva@io.com), is one of those people. If you have to ask, you don't apply. I don't apply, so don't feel bad.

Note that this was named after Senator Lloyd Bentsen's "You're no Jack Kennedy" line from the 1988 vice-presidential debates. And the original usage can be found in <3b09d2e6.79411309@news.supernews.com>:

http://groups.google.com/groups?as_umsgid=3b09d2e6.79411309@news.supernews.com

2. Godwin's Commentary

Godwin actually wrote a short article for Wired Magazine on the Law back in 1994:

http://www.wired.com/wired/archive/2.10/godwin.if_pr.html

The article is actually more about the power and danger of memes (thought-viruses) than about Godwin's Law itself, but it's worthwhile reading for anybody who actually got this far into the FAQ.

3. Author's Note on the Holocaust

Over the years, I have received several emails regarding this FAQ regarding the Holocaust itself, either disputing the holocaust or the numbers listed in this FAQ. I'd just like to make it clear that I don't have any particular desire to debate these points; this FAQ is meant to point out and explain a quirk of human nature, not to codify the history of World War II.

4. Additional Corollaries

There have been many additional corollaries and otherwise related
rules created since the net.legends FAQ codified them, and/or missed in
that FAQ. Those that have been brought to the author's attention:

Stead's Law (named for Lew Stead of alt.pagan fame):
Any discussion between more than 2 Pagans will eventually come around
to Christianity.
- Reported by Donal Brewich <donal@brewich.com>
- More information regarding its history would be appreciated

--
Copyright 1999-2003, Tim Skirvin
http://www.killfile.org/faqs/godwin.faq

251. Re: An idea for s source for o,scope deflection amplifiers.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-02 20:05:41 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <r_Wql.12633$PS5.4021@en-nntp-07.dc1.easynews.com>
Source record: 3104

"raypsi" <RBorowiak@gmail.com> wrote in message
news:1098f503-293c-40fd-a0c2-6abf9b9539fa@h20g2000yqn.googlegroups.com...
"I remember my days at RETS electronics schools we had a instructor his
name was Armstrong the cousin of the inventor of FM. In his class you
got to build a 100Mhz tube only scope, you bought all the parts from
him, nice scam, including the CRT, he made the CRT's himself from
scratch."

Doesn't sound like a scam at all unless he was seriously inflating the prices
of the parts compared to what you'd normally get them for. Indeed, assuming
the prices were in-line, it sounds like a great dead, since especailly for
something like the CRT, he's the one warrantying it and you know exactly where
the guy works. :-)

252. Re: #Re: Hijacking Newsgroup Threads

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-02 21:52:23 UTC
From: dave <dave@dave.dave>
Message-ID: <49ac5518$0$31170$bd467cd0@news.dslextreme.com>
Source record: 3105
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Stray Dog wrote:

>>
>
> FYI,
>
> There is a sociological phenomenon called "Godwin's Law"
>

I don't believe in Godwin.

253. Re: #Re: Hijacking Newsgroup Threads

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-02 23:52:26 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <r5SAugF6EHrJFwwG@g3ohx.demon.co.uk>
Source record: 3106
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In message <49ac5518$0$31170$bd467cd0@news.dslextreme.com>, dave
<dave@dave.dave> writes
>Stray Dog wrote:
>
>>>
>> FYI,
>> There is a sociological phenomenon called "Godwin's Law"
>>
>
>I don't believe in Godwin.

To me, the fact that His Law (in one form or another) is true proves
that He exists.

In the UK, in uk.radio.amateur, after about three 'overs', all threads
get hijacked and turn into a slanging match which is invariably about
the UK amateur 'Foundation Licence' (effectively a low-grade novice
licence). This is much more important than Nazis and the like.
--
Ian

254. Re: #Re: Hijacking Newsgroup Threads

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-03 03:44:12 UTC
From: Esther & Fester Bestertester <not@me.really>
Message-ID: <0001HW.C5D1E78C0196EE13B01AD9AF@news.sf.sbcglobal.net>
Source record: 3107
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Is there a corollary of Godwin Law where the original thread devolves into a discussion of Godwin's Law?

255. [ADMIN,META] Allow crossposting to rec.radio.amateur.moderated?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-03 14:22:16 UTC
From: rram@panix.com
Message-ID: <gojeci$m74$1@reader1.panix.com>
Source record: 3108
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.amateur.moderated

(Followups directed to poster by default. If followup to newsgroups is desired, edit your headers on followup to drop rec.radio.amateur.moderated from the Newsgroups line, else your article will be rejected.)

The rec.radio.amateur.moderated newsgroup enters its 3rd year of operation this month. Since its creation in February of 2007, we have approved nearly 3,000 articles about amateur radio and closely related subjects. We would like to thank our readers and posters for their quality contributions to our newsgroup.

When we first started out, consistent with our newsgroup's Charter and Posting Guidelines:

http://www.panix.com/~rram/usenet/rram/

we allowed discussion threads to be posted to our newsgroup only. Our moderation software is programmed to automatically reject any crossposts. The one exception has been periodic information postings that are crossposted to rec.radio.info, rec.answers, and/or news.answers.

Some moderated newsgroups, such as those in the comp.lang.perl.* and misc.kids.* hierarchies, started accepting crosspostings to appropriate unmoderated newsgroups after a suitable waiting period from their initial creation. Now that our newsgroup is well-established and carried at most major sites, we would like to implement this customary followup and allow some crossposting. We would propose to allow simultaneous crossposting (i.e., one article, with all newsgroups specified at once on the Newsgroups line in the headers) to rec.radio.amateur.moderated and one other unmoderated newsgroup in the rec.radio.amateur.*, alt.radio.amateur.*, and alt.ham-radio.* hierarchies only.

Pros:

- Allows the moderated and unmoderated newsgroups to share discussion threads of common interest, without propagating more than one set of articles to news, or showing them more than once in a newsreader. Presently, threads of common interest have to run in parallel, with different sets of followups, and requiring readers to have to follow two threads, possibly with duplicate articles, in different newsgroups. We have seen multiple examples of this happening in the amateur-radio-related newsgroups over the past 2 years.

- Provides the default action of submitting articles and followups to moderator review, as news servers will forward to us for approval any article that contains rec.radio.amateur.moderated on the Newsgroups line. This allows the moderated newsgroup crossposting to serve as a "guardian" or "sentinel" to discourage threads from getting hijacked into running off-topic or into personal abuse. This may also encourage posters to use the underutilized rec.radio.amateur.misc or .policy newsgroups as crossposting targets for articles that might otherwise be posted only to .moderated.

- Readers of the unmoderated newsgroups will enjoy high-quality, on-topic, discussion threads that would otherwise require subscribing to and reading a moderated newsgroup. Readers of the moderated newsgroup will enjoy high-quality, on-topic, discussion threads that would otherwise require subscribing to and reading other unmoderated newsgroups. Those unmoderated newsgroups may contain articles of widely varying degrees of quality and topic relevance.

- Participation in this crossposting scheme is completely voluntary. Posters of initial articles in threads will make the voluntary choice to add rec.radio.amateur.moderated and one other unmoderated newsgroup to the Newsgroups line when posting. Those following up to these crossposted threads will make a voluntary choice whether to keep rec.radio.amateur.moderated or any other newsgroup on the Newsgroups line, or remove them. Followups may be directed by default to any subset of the newsgroups on the Newsgroups line (or via E-mail to "poster") by specifying them on an appropriate Followup-To line. In short, you control what you post, where you post it, and what default destinations you want for any followups. This proposed crossposting scheme does not change any of these long-standing features of Usenet and newsreader software.

Cons:

- This will subject all such simultaneously crossposted articles to moderator review by us. If they do not meet the Charter and Posting Guidelines of rec.radio.amateur.moderated, they will be rejected. We will attempt to work with submitters to let them know what is happening, and how their articles can be fixed for eventual approval. However, rejected articles that were submitted anonymously without a traceable/derivable E-mail address or identity will have to be dropped silently without feedback to the unreachable submitter.

- Moderator review will introduce some posting delay. However, it has been our experience over the last 2 years that with our large moderation team distributed across many time zones, and the automation provided by our moderation software, we can turn submissions around relatively quickly, often within an hour.

- Many newsreaders do not give clear feedback to the user what newsgroups in which a given article appears, nor to what newsgroups a followup to that article will be sent by default. We expect to initially have to handle a few confused, possibly angry, submitters

who will insist that they did not intend to post to a moderated newsgroup. We are willing to provide the necessary polite feedback and user education to them to allow this crossposting scheme to work effectively. This will help ensure that the scheme is only used by those who are reasonably aware of the various pros and cons. We hope that this problem will diminish with time and greater user awareness.

- Not all newsgroups, especially those in the alt.* hierarchy, are carried at all sites. Users may find themselves following up by default to newsgroups that do not exist on their local news server, possibly resulting in article rejection from their server. Those users would have to edit their Newsgroups line for successful resubmission. We will work with users to get appropriate newsgroups added to their local servers, as well as with Panix to get those newsgroups added to Panix's server. However, as with default followups described in the previous paragraph, we expect to have to go through an initial period of user and news service provider education and polite feedback. We hope that this problem also will diminish with time and greater user awareness.

We propose to enforce this scheme in our moderation software as follows:

- Submissions simultaneously crossposted to more than 2 newsgroups will be automatically rejected with a rejection form letter (same as what happens now to submissions that are posted to more than 1 newsgroup).

- Submissions that contain newsgroups on the Newsgroups line other than approved newsgroups in the rec.radio.amateur.*, alt.radio.amateur.*, or alt.ham-radio.* hierarchies will be automatically rejected with a rejection form letter.

Approved rec.radio.amateur.* newsgroups are those that are currently listed in the latest version of the "List of Big Eight Newsgroups" which is crossposted monthly to news.announce.newgroups, news.groups, and news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those that have been created consistent with the suggestions in "So You Want to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

We will make every reasonable effort to keep our list of approved newsgroups up-to-date. In case we have overlooked any, and a submission is rejected in error as a result, the rejected submitter can E-mail us at our administrative contact address (in the signature at the bottom of this article, and the default Reply-To for the rejection message) requesting that it be added, and that the article be approved. We may still choose to reject articles crossposted to any alt.* newsgroup with an inappropriate name, including obscene language, embedded name-calling, or encouragement of unlawful conduct.

To help publicize this new editorial policy, we will update our Posting Guidelines, which are posted to the moderated newsgroup on the 15th of each month. Changes to our Posting Guidelines are indicated by an updated date in the Revision: auxiliary header at the top of the body, as well as "change bars" ('|') after each modified line of text. We will also add a short announcement, posted on the 1st of each month and cross-posted to the unmoderated newsgroups, restating this new editorial policy, and encouraging crossposted submissions.

Since this is a change to our newsgroup's editorial policies, and with some impact to the readers and posters of the unmoderated newsgroups, we would like to solicit 30 days of direct feedback and/or public discussion regarding this proposed change. For example, we would be interested to know if allowing crossposting to one other unmoderated newsgroup is enough, or if two would be preferable. We feel that more than two additional crossposted newsgroups greatly increases the probability of misconduct or accidental misposting that may result in article rejection by us. Also, should this scheme be opened up to uk.radio.amateur and aus.radio.amateur.* as well? You may send us E-mail directly to our administrative contact address below, which is the default Followup-To/Reply-To for this article. You may also discuss this publicly on the unmoderated newsgroups. In fact, we cannot stop you from doing so. We will make every reasonable effort to incorporate any feedback and suggestions. If we decide to implement this proposal, we will make a public announcement shortly after the end of the 30-day discussion period.

(Followups directed to poster by default. If followup to newsgroups is desired, edit your headers on followup to drop rec.radio.amateur.moderated from the Newsgroups line, else your article will be rejected.)

--
rec.radio.amateur.moderated Admin
rec-radio-amateur-moderated-request@panix.com

256. # Re: #Re: Hijacking Newsgroup Threads

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-03 15:53:46 UTC
From: Stray Dog <sdog2008@sdf.lonestar.org>
Message-ID: <Pine.NEB.4.64.0903031540110.12210@sdf.lonestar.org>
Source record: 3109
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Mon, 2 Mar 2009, Esther & Fester Bestertester wrote:

> Date: Mon, 2 Mar 2009 19:44:12 -0800
> From: Esther & Fester Bestertester <not@me.really>
> Newsgroups: rec.radio.amateur.antenna, rec.radio.amateur.homebrew,
> rec.radio.amateur.misc
> Subject: Re: #Re: Hijacking Newsgroup Threads
>
> Is there a corollary of Godwin Law where the original thread devolves into a
> discussion of Godwin's Law?

I am not aware of this, but the chances are surely infinitesimal.

A related (psychological) phenomenon is: "the elephant in the livingroom"
which is a tag label for people who are unaware of their own problems even
though everyone around them can see it.

My own pet notions about newsgroup threads are as follows:

1. It is a fact that dogs, when out being walked by their owners (or dogs
wandering on their own), go around and sniff fire hydrants and tree trunks
for dog piss residue. Because of their olfactory sensitivity, dogs can
identify other dogs on piss smell alone. So, its a form of communication.
After the sniff, the dog pisses on top of the prior layer of piss to tell
the next dog (maybe the same one as before) something like "Hi Joe, this
is Pete", etc., and thus makes dog socializing possible (as for millions
of years), and now, humans can do the same on newsgroup threads (read the
post, reply to the post, etc., thus giving rize to terms like "pissing
contest" etc).

2. There is a certain resemblance, to a certain degree, to the bar scene
in the movie "Star Wars"

3. I've also had the observations that: i) no matter what you say, and no
matter what your intentions, there will always be at least one person out
there who will be unhappy with what you say, ii) they will also completely
misunderstand what you say, and iii) no matter what you do to try to
explain it, it will still be misunderstood. In my retirement years I've
been reading a lot of history; kinda makes it obvious why we've had
thousands of years of wars, destruction, death, pain. Hmmmmmm? Is there a
lesson there? On newsgroups, thus, we get flamewars as a substitute.

257. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-03 19:43:14 UTC
From: David Lesher <wb8foz@panix.com>
Message-ID: <gok18h$6b1$2@reader1.panix.com>
Source record: 3110
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Esther & Fester Bestertester <not@me.really> writes:

>> However, you are far, far better off with a separate feeder and a 2-way
>> A/B switch. They are only a few dollars each.

>Better in the sense of being there to throw the switch, maybe. But I've got a
>programmable-event DTV converter box which allows me to record shows
>automatically. The antenna set-up needs to be automated.

Two friends both bought a $125 dual DTV RX box; its output is TCP/IP and the
control input a web browser.

One antenna goes each way....

--
A host is a host from coast to coast.................wb8foz@nrk.com
& no one will talk to a host that's close........[v].(301) 56-LINUX
Unless the host (that isn't close).........................pob 1433
is busy, hung or dead....................................20915-1433

258. Peak-to-peak voltage for mic input?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-03 22:19:14 UTC
From: "dave.harper" <dave.harper@gmail.com>
Message-ID: <dde847a2-7e8e-41f0-ae2f-561089232dcf@o8g2000pre.googlegroups.com>
Source record: 3111
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I've made a digital modem and am trying to figure out how much I need
to reduce the modem's audio output before piping the signal into an IC-
V8. I want to make sure the voltage is high enough to RX well, but
not so high that the signal is clipped of the IC-V8 is damaged.
Anyone know what the typical peak-to-peak voltage is for a standard
mic input?

Thanks in advance for any advice!
Dave

259. Re: Peak-to-peak voltage for mic input?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-03 22:54:53 UTC
From: Highland Ham <rfburns@allbands.net>
Message-ID: <v8ednVDGKJiiKDDUnZ2dnUVZ8gCWnZ2d@pipex.net>
Source record: 3112
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

dave.harper wrote:
> I've made a digital modem and am trying to figure out how much I need
> to reduce the modem's audio output before piping the signal into an IC-
> V8. I want to make sure the voltage is high enough to RX well, but
> not so high that the signal is clipped of the IC-V8 is damaged.
> Anyone know what the typical peak-to-peak voltage is for a standard
> mic input?
>
> Thanks in advance for any advice!
==========
Assuming that the modem has an adjustable output , I would suggest you
hook it up to the radio and ,starting at zero input ,see at what mike
input level you get an output by listening to a receiver.
If the radio has its own mike being an electret type (possibly with an
additional built-in pre-amplifier) the mike input signal will highly
likely be in the 50 - 300 mV range .

Frank GM0CSZ / KN6WH

260. Modulation Techniques for MODEM with 128Kbps at 100Khz

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-04 04:35:53 UTC
From: Ammankumar <s.ammankumar@gmail.com>
Message-ID: <a3d872fe-4125-409b-b1df-172524dbee31@y33g2000prg.googlegroups.com>
Source record: 3113

Hi All,

1) I want to implement MODEM with 128Kbps at 100Khz with high
doppler shift channel. Which modulation technique would be suitable .
Whether I can go with OFDM or SC-FDMA? Any suggestions

2) Is it possible to simulate 128Kbps with Matlab

Thanks & Regards,
Ammankumar.S

261. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-04 08:41:49 UTC
From: Esther & Fester Bestertester <not@me.really>
Message-ID: <0001HW.C5D37ECD01F660E2B01AD9AF@news.sf.sbcglobal.net>
Source record: 3114
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

> Two friends both bought a $125 dual DTV RX box; its output is TCP/IP and the
> control input a web browser.

Would that be:

<http://www.silicondust.com/products/hdhomerun_atsc> ?

262. Re: Hack a DTV antenna for dual directions?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-04 19:23:26 UTC
From: David Lesher <wb8foz@panix.com>
Message-ID: <gomkfeaeb5@reader1.panix.com>
Source record: 3115
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Esther & Fester Bestertester <not@me.really> writes:

>> Two friends both bought a $125 dual DTV RX box; its output is TCP/IP and the
>> control input a web browser.

>Would that be:

><http://www.silicondust.com/products/hdhomerun_atsc> ?

That looks like it but I'd have to ask to be sure...

--
A host is a host from coast to coast.................wb8foz@nrk.com
& no one will talk to a host that's close........[v].(301) 56-LINUX
Unless the host (that isn't close).........................pob 1433
is busy, hung or dead....................................20915-1433

263. HV SMPS

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-05 00:20:17 UTC
From: JIMMIE <jimmie68@gmail.com>
Message-ID: <ac16b7df-daba-421e-84df-5b33898b0ddc@i20g2000prf.googlegroups.com>
Source record: 3116

Ive been playing around with some old UPSs that are the switch mode type, the ones without the big iron transformers. I m not sure if I have a handle on how they work or not but it seems very similar to a Class D amplifier amplifiying a 60HZ input, well sort of. It seems like they dont actually input a 60Hz signal rather they just go directly from digital by generating the pulse width modulated waveforms with a computer. I was thinking that a transformer might be placed before the output low pass filter to step up the voltage for tube circuits, maybe even a TX PA. No doubt for this to have any merit the LPF would have to be redsigned.

Jimmie

264. Seeking New FAQ/Intro Maintainers for rec.radio.amateur.*

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-07 07:05:02 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/recruitment-1-1236409501@panix.com>
Source record: 3117
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/recruitment
Revision: 1.1 2007/09/29 18:42:47
Posting-Frequency: posted monthly
URL: http://www.faqs.org/faqs/radio/personal-intro/

Changes followed by "|".

The rec.radio.info newsgroup, first established in 1993, has been
recently revived by an active moderation team. We are currently seeking
suitable information, FAQ, and bulletin articles from the entire
rec.radio.* newsgroup hierarchy for simultaneous cross-posting to our
newsgroup.

We are seeking a replacement maintainer for the following information
bulletin formerly posted to rec.radio.amateur.* (and currently archived
at http://www.faqs.org/faqs/radio/personal-intro/ ):

radio/personal-intro
Subject: Guide to the rec.radio Newsgroups
Maintainer: jeffreyh@Hawaii.Edu (Jeffrey Herman)
Last Posted: 9 Nov 2001 06:18:17 GMT
Posting-Frequency: 15th of each month

We are willing to provide any technical support necessary to get this
article updated and automatically posted again at a regular interval.
This would include establishing contact with the original maintainer for
any necessary permissions. We would prefer to seek a new, dedicated
maintainer at this time, rather than start auto-posting the original
article ourselves.

For more information about our newsgroup, see:

http://www.panix.com/~rram/usenet/rri/index.html

Please direct any comments, questions, or criticisms to
rec-radio-info-request@panix.com.
```

265. Re: HV SMPS

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-08 23:32:38 UTC
From: jgboyles@aol.com
Message-ID: <01290be1-9634-446f-8158-a2902a00890e@e5g2000vbe.googlegroups.com>
Source record: 3118

On Mar 4, 7:20 pm, JIMMIE <jimmi...@gmail.com> wrote:
> Ive been playing around with some old UPSs that are the switch mode
> type, the ones without the big iron transformers. I m not sure if I
> have a handle on how they work or not but it seems very similar to a
> Class D amplifier amplifiying a 60HZ input, well sort of. It seems
> like they dont actually input a 60Hz signal rather they just go
> directly from digital by generating the pulse width modulated
> waveforms with a computer. I was thinking that a transformer might be
> placed before the output low pass filter to step up the voltage for
> tube circuits, maybe even a TX PA. No doubt for this to have any merit
> the LPF would have to be redsigned.
>
> Jimmie

There are a number of different topologies. One is to convert the
120VAC to 167VDC and then chop it up, usually >20khz and feed that to
transformers to convert to the desired voltages, and then rectify and
filter it once again to get the DC outputs.

The utility of a SMPS is the efficiency, and the light wieght.
Efficient because it operates class D and light because the magnetics
at high frequencies are much lighter than 60hz.

The downside of SMPS is the electronics are rather complex, and the
magnetics are hard to (for me) design.

I don't see any reason you could not modify a SMPS to get a couple KV
for Tube operation. Seems I remember someone advertising a SMPS
capabible of KV output, but I can't put my hands on it. Keep in mind
that a SMPS will tear up you receiver all up and down the bands unless
it is very well designed to eliminate noise.

I use a commercial 50VDC 22AMP SMPS to run my 600 watt solid state
amp.

73 Gary N4AST

266. Re: HV SMPS

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-09 01:23:27 UTC
From: JIMMIE <jimmie68@gmail.com>
Message-ID: <ca5ea42e-e065-4230-8509-979166654a39@c11g2000yqj.googlegroups.com>
Source record: 3119

On Mar 8, 7:32 pm, jgboy...@aol.com wrote:
> On Mar 4, 7:20 pm, JIMMIE <jimmi...@gmail.com> wrote:
>
> > Ive been playing around with some old UPSs that are the switch mode
> > type, the ones without the big iron transformers. I m not sure if I
> > have a handle on how they work or not but it seems very similar to a
> > Class D amplifier amplifiying a 60HZ input, well sort of. It seems
> > like they dont actually input a 60Hz signal rather they just go
> > directly from digital by generating the pulse width modulated
> > waveforms with a computer. I was thinking that a transformer might be
> > placed before the output low pass filter to step up the voltage for
> > tube circuits, maybe even a TX PA. No doubt for this to have any merit
> > the LPF would have to be redsigned.
>
> > Jimmie
>
> There are a number of different topologies. One is to convert the
> 120VAC to 167VDC and then chop it up, usually >20khz and feed that to
> transformers to convert to the desired voltages, and then rectify and
> filter it once again to get the DC outputs.
>
> The utility of a SMPS is the efficiency, and the light wieght.
> Efficient because it operates class D and light because the magnetics
> at high frequencies are much lighter than 60hz.
>
> The downside of SMPS is the electronics are rather complex, and the
> magnetics are hard to (for me) design.
>
> I don't see any reason you could not modify a SMPS to get a couple KV
> for Tube operation. Seems I remember someone advertising a SMPS
> capabible of KV output, but I can't put my hands on it. Keep in mind
> that a SMPS will tear up you receiver all up and down the bands unless
> it is very well designed to eliminate noise.
>
> I use a commercial 50VDC 22AMP SMPS to run my 600 watt solid state
> amp.
>
> 73 Gary N4AST

Gary I have likewise used a UPS for a DC power supply by taking the
voltage of from across the batteries. I briefly had a similar amp that
I was repairing for a friend and thats the way I powered it.

Jimmie

267. Re: HV SMPS

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-10 03:02:28 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <f756def7-cd91-410d-9b66-0a9c8cc6188c@v15g2000yqn.googlegroups.com>
Source record: 3120

On Mar 8, 9:23 pm, JIMMIE <jimmi...@gmail.com> wrote:
> On Mar 8, 7:32 pm, jgboy...@aol.com wrote:
>
>
>
> > On Mar 4, 7:20 pm, JIMMIE <jimmi...@gmail.com> wrote:
>
> > > Ive been playing around with some old UPSs that are the switch mode
> > > type, the ones without the big iron transformers. I m not sure if I
> > > have a handle on how they work or not but it seems very similar to a
> > > Class D amplifier amplifiying a 60HZ input, well sort of. It seems
> > > like they dont actually input a 60Hz signal rather they just go
> > > directly from digital by generating the pulse width modulated
> > > waveforms with a computer. I was thinking that a transformer might be
> > > placed before the output low pass filter to step up the voltage for
> > > tube circuits, maybe even a TX PA. No doubt for this to have any merit
> > > the LPF would have to be redsigned.
>
> > > Jimmie
>
> > There are a number of different topologies. One is to convert the
> > 120VAC to 167VDC and then chop it up, usually >20khz and feed that to
> > transformers to convert to the desired voltages, and then rectify and
> > filter it once again to get the DC outputs.
>
> > The utility of a SMPS is the efficiency, and the light wieght.
> > Efficient because it operates class D and light because the magnetics
> > at high frequencies are much lighter than 60hz.
>
> > The downside of SMPS is the electronics are rather complex, and the
> > magnetics are hard to (for me) design.
>
> > I don't see any reason you could not modify a SMPS to get a couple KV
> > for Tube operation. Seems I remember someone advertising a SMPS
> > capabible of KV output, but I can't put my hands on it. Keep in mind
> > that a SMPS will tear up you receiver all up and down the bands unless
> > it is very well designed to eliminate noise.
>
> > I use a commercial 50VDC 22AMP SMPS to run my 600 watt solid state
> > amp.
>
> > 73 Gary N4AST
>
> Gary I have likewise used a UPS for a DC power supply by taking the

> voltage of from across the batteries. I briefly had a similar amp that
> I was repairing for a friend and thats the way I powered it.
>
> Jimmie

Hey OM

Sometimes you see 2 transformers in these SMPS and one is a magnetic amplifier. Just before transistors took hold they were using mag amps . The Germans were experts in mag amps and we got the tech from them after WWII. I think one could have a mag amp for each hf band. Who knows if it weren't for transistors we might be using mag amps all over the place. You can't get much simpler than a hunk of wire on a magnetic core, there's no money to be made there. And mag amps don't blow out like semiconductors. they aren't effected by huge EM pulses either.

73 OM
n8zu

268. Re: HV SMPS

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-10 18:36:15 UTC
From: jgboyles@aol.com
Message-ID: <a8efd22c-20ea-48d6-8a86-1f434c93ca36@v19g2000yqn.googlegroups.com>
Source record: 3121

On Mar 9, 10:02 pm, raypsi <RBorow...@gmail.com> wrote:
> On Mar 8, 9:23 pm, JIMMIE <jimmi...@gmail.com> wrote:
>
>
>
>
>
> > On Mar 8, 7:32 pm, jgboy...@aol.com wrote:
>
> > > On Mar 4, 7:20 pm, JIMMIE <jimmi...@gmail.com> wrote:
>
> > > > Ive been playing around with some old UPSs that are the switch mode
> > > > type, the ones without the big iron transformers. I m not sure if I
> > > > have a handle on how they work or not but it seems very similar to a
> > > > Class D amplifier amplifiying a 60HZ input, well sort of. It seems
> > > > like they dont actually input a 60Hz signal rather they just go
> > > > directly from digital by generating the pulse width modulated
> > > > waveforms with a computer. I was thinking that a transformer might be
> > > > placed before the output low pass filter to step up the voltage for
> > > > tube circuits, maybe even a TX PA. No doubt for this to have any merit
> > > > the LPF would have to be redsigned.
>
> > > > Jimmie
>
> > > There are a number of different topologies. One is to convert the
> > > 120VAC to 167VDC and then chop it up, usually >20khz and feed that to
> > > transformers to convert to the desired voltages, and then rectify and
> > > filter it once again to get the DC outputs.
>
> > > The utility of a SMPS is the efficiency, and the light wieght.
> > > Efficient because it operates class D and light because the magnetics
> > > at high frequencies are much lighter than 60hz.
>
> > > The downside of SMPS is the electronics are rather complex, and the
> > > magnetics are hard to (for me) design.
>
> > > I don't see any reason you could not modify a SMPS to get a couple KV
> > > for Tube operation. Seems I remember someone advertising a SMPS
> > > capabible of KV output, but I can't put my hands on it. Keep in mind
> > > that a SMPS will tear up you receiver all up and down the bands unless
> > > it is very well designed to eliminate noise.
>
> > > I use a commercial 50VDC 22AMP SMPS to run my 600 watt solid state

> > > amp.
>
> > > 73 Gary N4AST
>
> > Gary I have likewise used a UPS for a DC power supply by taking the
> > voltage of from across the batteries. I briefly had a similar amp that
> > I was repairing for a friend and thats the way I powered it.
>
> > Jimmie
>
> Hey OM
>
> Sometimes you see 2 transformers in these SMPS and one is a magnetic
> amplifier. Just before transistors took hold they were using mag
> amps . The Germans were experts in mag amps and we got the tech from
> them after WWII. I think one could have a mag amp for each hf band.
> Who knows if it weren't for transistors we might be using mag amps all
> over the place. You can't get much simpler than a hunk of wire on a
> magnetic core, there's no money to be made there. And mag amps don't
> blow out like semiconductors. they aren't effected by huge EM pulses
> either.
>
> 73 OM
> n8zu- Hide quoted text -
>
> - Show quoted text -

Mag Amps were used quite a bit in battery chargers, AC motor controls, AC generator excitation systems, voltage regulators ect., they were as you say, simple and rugged. I think it was in the 80's when power semiconductors started getting bigger and better that they started to get phased out. There is a book about mag amps written in 1960 that you can download on the free tech books site. It talks about how amazed the British engineers were at the Germans use of mag amps in their rockets and fire control systems. Even though vacuum tubes had been around for several years, the Germans discovered that mag amps were superior in many applications.

I don't think they would make a very practical HF amplifier, because they operate with AC supply voltages. They will not effectively amplify an AC voltage whose frequency is any higher than its supply voltage frequency. That is why mag amps usually operate at 60HZ, there are plenty of 60HZ power supplies around.

Gary N4AST

269. Re: HV SMPS

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-11 12:59:25 UTC
From: JIMMIE <jimmie68@gmail.com>
Message-ID: <c7e55015-92c6-4913-a55f-0c7c0abc0f31@q9g2000yqc.googlegroups.com>
Source record: 3122

On Mar 10, 2:36 pm, jgboy...@aol.com wrote:
> On Mar 9, 10:02 pm, raypsi <RBorow...@gmail.com> wrote:
>
>
>
>
>
> > On Mar 8, 9:23 pm, JIMMIE <jimmi...@gmail.com> wrote:
>
> > > On Mar 8, 7:32 pm, jgboy...@aol.com wrote:
>
> > > > On Mar 4, 7:20 pm, JIMMIE <jimmi...@gmail.com> wrote:
>
> > > > > Ive been playing around with some old UPSs that are the switch mode
> > > > > type, the ones without the big iron transformers. I m not sure if I
> > > > > have a handle on how they work or not but it seems very similar to a
> > > > > Class D amplifier amplifiying a 60HZ input, well sort of. It seems
> > > > > like they dont actually input a 60Hz signal rather they just go
> > > > > directly from digital by generating the pulse width modulated
> > > > > waveforms with a computer. I was thinking that a transformer might be
> > > > > placed before the output low pass filter to step up the voltage for
> > > > > tube circuits, maybe even a TX PA. No doubt for this to have any merit
> > > > > the LPF would have to be redsigned.
>
> > > > > Jimmie
>
> > > > There are a number of different topologies. One is to convert the
> > > > 120VAC to 167VDC and then chop it up, usually >20khz and feed that to
> > > > transformers to convert to the desired voltages, and then rectify and
> > > > filter it once again to get the DC outputs.
>
> > > > The utility of a SMPS is the efficiency, and the light wieght.
> > > > Efficient because it operates class D and light because the magnetics
> > > > at high frequencies are much lighter than 60hz.
>
> > > > The downside of SMPS is the electronics are rather complex, and the
> > > > magnetics are hard to (for me) design.
>
> > > > I don't see any reason you could not modify a SMPS to get a couple KV
> > > > for Tube operation. Seems I remember someone advertising a SMPS
> > > > capabible of KV output, but I can't put my hands on it. Keep in mind
> > > > that a SMPS will tear up you receiver all up and down the bands unless
> > > > it is very well designed to eliminate noise.
>

> > > > I use a commercial 50VDC 22AMP SMPS to run my 600 watt solid state
> > > > amp.
>
> > > > 73 Gary N4AST
>
> > > Gary I have likewise used a UPS for a DC power supply by taking the
> > > voltage of from across the batteries. I briefly had a similar amp that
> > > I was repairing for a friend and thats the way I powered it.
>
> > > Jimmie
>
> > Hey OM
>
> > Sometimes you see 2 transformers in these SMPS and one is a magnetic
> > amplifier. Just before transistors took hold they were using mag
> > amps . The Germans were experts in mag amps and we got the tech from
> > them after WWII. I think one could have a mag amp for each hf band.
> > Who knows if it weren't for transistors we might be using mag amps all
> > over the place. You can't get much simpler than a hunk of wire on a
> > magnetic core, there's no money to be made there. And mag amps don't
> > blow out like semiconductors. they aren't effected by huge EM pulses
> > either.
>
> > 73 OM
> > n8zu- Hide quoted text -
>
> > - Show quoted text -
>
> Mag Amps were used quite a bit in battery chargers, AC motor controls,
> AC generator excitation systems, voltage regulators ect., they were as
> you say, simple and rugged. I think it was in the 80's when power
> semiconductors started getting bigger and better that they started to
> get phased out. There is a book about mag amps written in 1960 that
> you can download on the free tech books site. It talks about how
> amazed the British engineers were at the Germans use of mag amps in
> their rockets and fire control systems. Even though vacuum tubes had
> been around for several years, the Germans discovered that mag amps
> were superior in many applications.
>
> I don't think they would make a very practical HF amplifier, because
> they operate with AC supply voltages. They will not effectively
> amplify an AC voltage whose frequency is any higher than its supply
> voltage frequency. That is why mag amps usually operate at 60HZ,
> there are plenty of 60HZ power supplies around.
>
> Gary N4AST- Hide quoted text -
>
> - Show quoted text -

Ive worked on equipment that used magnetic amplifiers for over 30 years but have never really gotten my head around how they worked. Ive seen them used in welders,computers and radars,all now very obsolete. From what I have read they sound a lot like a parametric amplifiier.

Jimmie

270. When is class C no longer good enough for digital modes?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-11 13:41:55 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <e4e3da2d-3451-41f9-8740-4131cc5a3174@h20g2000yqn.googlegroups.com>
Source record: 3123

Class C operation seems very well suited to HF CW operation. At least if the resulting envelope looks "nice" by ARRL handbook definition of keyclick reduction, I guess.

But is it good enough for RTTY?

How about for PSK-31? Olivia?

What I've got is an old Eico 720 (Novice 75W-class transmitter biased for deep class C, for those too young to remember) that I currently use for CW, but would like to try out for RTTY or maybe PSK-31 by feeding appropriate waveforms into the "VFO in" jack. My gut feeling is that RTTY would be OK but don't really understand how class C will mess up the PSK-31 waveform or introduce intermod that will make the resulting spectrum broader than necessary.

The Class C stages will clearly fail the usual SSB two-tone testing but what is a more appropriate test to say that it's good enough - or not - for PSK-31?

Tim N3QE

271. More reflectors = better?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-11 15:46:25 UTC
From: Usual Suspect <reply@thegroup.net>
Message-ID: <0001HW.C5DD2AE101A1C1C2B02049AF@news.sf.sbcglobal.net>
Source record: 3124
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Hoverman design for UHF TV:

<http://www.digitalhome.ca/ota/superantenna/design.htm>

More reflectors would make it easier to bond them together (ie, a screen with only horizontal elements) for more physical strength.

Does adding more reflectors introduce any negative byproducts?

I see that in this design the reflectors are of particular lengths. Does this imply that lengthening them is counterproductive?

Thanks.
--
Al, the usual

272. Re: More reflectors = better?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-11 18:40:01 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <37bfffac-513e-47af-8fd1-a048ae8e4d37@o11g2000yql.googlegroups.com>
Source record: 3125
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Mar 11, 8:46 am, Usual Suspect <re...@thegroup.net> wrote:
> Hoverman design for UHF TV:
>
> <http://www.digitalhome.ca/ota/superantenna/design.htm>
>
> More reflectors would make it easier to bond them together (ie, a screen with
> only horizontal elements) for more physical strength.
>
> Does adding more reflectors introduce any negative byproducts?
>
> I see that in this design the reflectors are of particular lengths. Does this
> imply that lengthening them is counterproductive?
>
> Thanks.
> --
> Al, the usual

From the discussion on that website, they make it sound like the
antenna is pretty insensitive to whether a reflector screen or
individual tuned reflectors are used. But it's obvious that there've
been several folk involved with modelling and building these antennas
in that group. Have you tried asking them? Seems like they're the
ones with the experience.

It's nice to see a practical homebrew antenna design like that.
Thanks for posting the link.

Cheers,
Tom

273. Re: When is class C no longer good enough for digital modes?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-11 18:55:11 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <bb3ab395-e5ee-4c51-b7b2-db6f39a82847@j35g2000yqh.googlegroups.com>
Source record: 3126

On Mar 11, 6:41 am, Tim Shoppa <sho...@trailing-edge.com> wrote:
> Class C operation seems very well suited to HF CW operation. At least
> if the resulting envelope looks "nice" by ARRL handbook definition of
> keyclick reduction, I guess.
>
> But is it good enough for RTTY?
>
> How about for PSK-31? Olivia?
>
> What I've got is an old Eico 720 (Novice 75W-class transmitter biased
> for deep class C, for those too young to remember) that I currently
> use for CW, but would like to try out for RTTY or maybe PSK-31 by
> feeding appropriate waveforms into the "VFO in" jack. My gut feeling
> is that RTTY would be OK but don't really understand how class C will
> mess up the PSK-31 waveform or introduce intermod that will make the
> resulting spectrum broader than necessary.
>
> The Class C stages will clearly fail the usual SSB two-tone testing
> but what is a more appropriate test to say that it's good enough - or
> not - for PSK-31?
>
> Tim N3QE

PSK-31 is just slow phase-shift keying, no? If the 720 had very
narrow tuned circuits in it, it could be a problem preserving the
fidelity of really fast phase-shift keying, but for the speeds
involved, a very tiny percentage of the bandwidth of the transmitter,
there simply shouldn't be any problem. I suppose there could be an
issue if the transmitter tries to self-oscillate, but if it does,
you've got bigger problems than PSK-31 transmission!

Cheers,
Tom

274. Re: When is class C no longer good enough for digital modes?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-12 01:40:10 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <qoWdnco3T_5n-iXUnZ2dnUVZ_rrinZ2d@web-ster.com>
Source record: 3127

On Wed, 11 Mar 2009 06:41:55 -0700, Tim Shoppa wrote:

> Class C operation seems very well suited to HF CW operation. At least if
> the resulting envelope looks "nice" by ARRL handbook definition of
> keyclick reduction, I guess.
>
> But is it good enough for RTTY?
>
> How about for PSK-31? Olivia?
>
> What I've got is an old Eico 720 (Novice 75W-class transmitter biased
> for deep class C, for those too young to remember) that I currently use
> for CW, but would like to try out for RTTY or maybe PSK-31 by feeding
> appropriate waveforms into the "VFO in" jack. My gut feeling is that
> RTTY would be OK but don't really understand how class C will mess up
> the PSK-31 waveform or introduce intermod that will make the resulting
> spectrum broader than necessary.
>
> The Class C stages will clearly fail the usual SSB two-tone testing but
> what is a more appropriate test to say that it's good enough - or not -
> for PSK-31?
>
> Tim N3QE

If the signal has a constant envelope then it'll be fine with class C.

RTTY should be fine, I don't know about PSK-31 or Olivia.

--
http://www.wescottdesign.com

275. Re: When is class C no longer good enough for digital modes?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-12 02:11:18 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <NPednVj9INvb8iXUnZ2dnUVZ_hmcnZ2d@linkline.com>
Source record: 3128

On Wed, 11 Mar 2009 11:55:11 -0700, K7ITM wrote:

> On Mar 11, 6:41 am, Tim Shoppa <sho...@trailing-edge.com> wrote:
>> Class C operation seems very well suited to HF CW operation. At least
>> if the resulting envelope looks "nice" by ARRL handbook definition of
>> keyclick reduction, I guess.
>>
>> But is it good enough for RTTY?
>>
>> How about for PSK-31? Olivia?
>>
>> What I've got is an old Eico 720 (Novice 75W-class transmitter biased
>> for deep class C, for those too young to remember) that I currently use
>> for CW, but would like to try out for RTTY or maybe PSK-31 by feeding
>> appropriate waveforms into the "VFO in" jack. My gut feeling is that
>> RTTY would be OK but don't really understand how class C will mess up
>> the PSK-31 waveform or introduce intermod that will make the resulting
>> spectrum broader than necessary.
>>
>> The Class C stages will clearly fail the usual SSB two-tone testing but
>> what is a more appropriate test to say that it's good enough - or not -
>> for PSK-31?
>>
>> Tim N3QE
>
> PSK-31 is just slow phase-shift keying, no? If the 720 had very narrow
> tuned circuits in it, it could be a problem preserving the fidelity of
> really fast phase-shift keying, but for the speeds involved, a very tiny
> percentage of the bandwidth of the transmitter, there simply shouldn't
> be any problem. I suppose there could be an issue if the transmitter
> tries to self-oscillate, but if it does, you've got bigger problems than
> PSK-31 transmission!
>
PSK31 uses a raised cosine amplitude weighted amplitude function in order
to contain the occupied bandwidth. Use of a class C amplifier disrupts
the weighting and causes the bandwidth to spread considerably. The
demodulator will still work fairly well but the spectral spreading is
considered un-neighborly!

bart
wb6hqk

276. Re: When is class C no longer good enough for digital modes?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-12 04:36:57 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <0Lidnawgl9_0DCXUnZ2dnUVZ_vvinZ2d@web-ster.com>
Source record: 3129

On Wed, 11 Mar 2009 21:11:18 -0500, Bart Rowlett wrote:

> On Wed, 11 Mar 2009 11:55:11 -0700, K7ITM wrote:
>
>> On Mar 11, 6:41 am, Tim Shoppa <sho...@trailing-edge.com> wrote:
>>> Class C operation seems very well suited to HF CW operation. At least
>>> if the resulting envelope looks "nice" by ARRL handbook definition of
>>> keyclick reduction, I guess.
>>>
>>> But is it good enough for RTTY?
>>>
>>> How about for PSK-31? Olivia?
>>>
>>> What I've got is an old Eico 720 (Novice 75W-class transmitter biased
>>> for deep class C, for those too young to remember) that I currently
>>> use for CW, but would like to try out for RTTY or maybe PSK-31 by
>>> feeding appropriate waveforms into the "VFO in" jack. My gut feeling
>>> is that RTTY would be OK but don't really understand how class C will
>>> mess up the PSK-31 waveform or introduce intermod that will make the
>>> resulting spectrum broader than necessary.
>>>
>>> The Class C stages will clearly fail the usual SSB two-tone testing
>>> but what is a more appropriate test to say that it's good enough - or
>>> not - for PSK-31?
>>>
>>> Tim N3QE
>>
>> PSK-31 is just slow phase-shift keying, no? If the 720 had very narrow
>> tuned circuits in it, it could be a problem preserving the fidelity of
>> really fast phase-shift keying, but for the speeds involved, a very
>> tiny percentage of the bandwidth of the transmitter, there simply
>> shouldn't be any problem. I suppose there could be an issue if the
>> transmitter tries to self-oscillate, but if it does, you've got bigger
>> problems than PSK-31 transmission!
>>
> PSK31 uses a raised cosine amplitude weighted amplitude function in
> order to contain the occupied bandwidth. Use of a class C amplifier
> disrupts the weighting and causes the bandwidth to spread considerably.
> The demodulator will still work fairly well but the spectral spreading
> is considered un-neighborly!
>
> bart
> wb6hqk

So, PSK-31 is out.

(Unless you want to get fancy and amplitude modulate to preserve the envelope at the same time that you phase modulate the VFO input to preserve the phase. There's almost no sane reason to try this, but it'd be fun if it worked. Kind of a "Look how well my old iron works! (pay no attention to the DSP behind the curtain).")

--
http://www.wescottdesign.com

277. Re: When is class C no longer good enough for digital modes?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-12 05:46:59 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <uv7hr41vihjeu5j64g8ug1mmqnj0go2fhq@4ax.com>
Source record: 3130

On Wed, 11 Mar 2009 23:36:57 -0500, Tim Wescott <tim@seemywebsite.com>
wrote:

>On Wed, 11 Mar 2009 21:11:18 -0500, Bart Rowlett wrote:

>> PSK31 uses a raised cosine amplitude weighted amplitude function in
>> order to contain the occupied bandwidth. Use of a class C amplifier
>> disrupts the weighting and causes the bandwidth to spread considerably.
>> The demodulator will still work fairly well but the spectral spreading
>> is considered un-neighborly!
>>
>> bart
>> wb6hqk
>
>So, PSK-31 is out.
>
>(Unless you want to get fancy and amplitude modulate to preserve the
>envelope at the same time that you phase modulate the VFO input to
>preserve the phase. There's almost no sane reason to try this, but it'd
>be fun if it worked. Kind of a "Look how well my old iron works! (pay no
>attention to the DSP behind the curtain).")

A plate modulated AM transmitter is basically a class C amplifier with
variable supply voltage, unfortunately it is hard to get 100 %
modulation with such simple systems, i.e. it is hard to get the power
down to 0. However, much of the PSK-31 envelope can still be
simulated.

Plate modulated AM transmitters for voice communication might have a
modulation transformer with a quite limited bandwidth, which might not
work well the slow PSK31 envelope.

Paul OH3LWR

278. Re: When is class C no longer good enough for digital modes?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-12 16:00:10 UTC
From: JIMMIE <jimmie68@gmail.com>
Message-ID: <4365dda5-78a0-4076-8dd2-4bd8cbd35c45@e18g2000yqo.googlegroups.com>
Source record: 3131

On Mar 11, 9:41 am, Tim Shoppa <sho...@trailing-edge.com> wrote:
> Class C operation seems very well suited to HF CW operation. At least
> if the resulting envelope looks "nice" by ARRL handbook definition of
> keyclick reduction, I guess.
>
> But is it good enough for RTTY?
>
> How about for PSK-31? Olivia?
>
> What I've got is an old Eico 720 (Novice 75W-class transmitter biased
> for deep class C, for those too young to remember) that I currently
> use for CW, but would like to try out for RTTY or maybe PSK-31 by
> feeding appropriate waveforms into the "VFO in" jack. My gut feeling
> is that RTTY would be OK but don't really understand how class C will
> mess up the PSK-31 waveform or introduce intermod that will make the
> resulting spectrum broader than necessary.
>
> The Class C stages will clearly fail the usual SSB two-tone testing
> but what is a more appropriate test to say that it's good enough - or
> not - for PSK-31?
>
> Tim N3QE

Its not just a matter of whether or not it will work but whether it
not it will work within the confinments of the allocatted bandwidth. I
think any mode normally used with a SSB transmition would probably
flunk this test.

Jimmie

279. USREPEATERS.COM downloadable digital database directory list.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-12 20:59:15 UTC
From: slohand <jglass@ab9if.com>
Message-ID: <7cc2c045-87a5-4bdc-ba59-f2618f2ce80e@q9g2000yqc.googlegroups.com>
Source record: 3132

Always current and always up to date with the latest information on
the website.

Free memberships to view all the data.

or Paid memberships to download.

Coupon code on front page for big discount and membership gets doubled
to 2 years.

280. Magnetic Amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-12 21:50:35 UTC
From: JIMMIE <jimmie68@gmail.com>
Message-ID: <af807495-2ad3-4bce-b95a-ffa0715889bc@l16g2000yqo.googlegroups.com>
Source record: 3133

I would like to experiment with some magnetic amplifier circuits but I havent been able to find any practical circuits I could build. I am interested in relalitively small signal amplification of AF and possibly ultrasonic frequencies purely for educational purpose. I have a couple of transformers and wan to see what I can do with them.

Jimmie

281. Re: Magnetic Amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-12 22:31:44 UTC
From: Clifford Heath <no@spam.please.net>
Message-ID: <49b98e2b$0$20620$afc38c87@news.optusnet.com.au>
Source record: 3134

JIMMIE wrote:
> I would like to experiment with some magnetic amplifier circuits but I
> havent been able to find any practical circuits I could build. I am
> interested in relalitively small signal amplification of AF and
> possibly ultrasonic frequencies purely for educational purpose. I have
> a couple of transformers and wan to see what I can do with them.

I've seen this discussed on sci.electronics.design, and there are
probably folk there who can help you.

Clifford Heath, VK3CLF.

282. Re: Magnetic Amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-12 23:21:09 UTC
From: jgboyles@aol.com
Message-ID: <95623b76-ed28-41f1-9e3e-8aa69f24a364@z1g2000yqn.googlegroups.com>
Source record: 3135

On Mar 12, 4:50 pm, JIMMIE <jimmi...@gmail.com> wrote:
> I would like to experiment with some magnetic amplifier circuits but I
> havent been able to find any practical circuits I could build. I am
> interested in relalitively small signal amplification of AF and
> possibly ultrasonic frequencies purely for educational purpose. I have
> a couple of transformers and wan to see what I can do with them.
>
> Jimmie

Jimmie, download "Magnetic Amplifiers" by Paul Mali. Google and it is
free. I mentioned this in the HV SMPS thread. This is the only text
I have ever read on Mag. Amps, and it is good. Should give you ideas
for experimentation.

Gary N4AST

283. Re: Magnetic Amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-13 09:54:08 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <3e7f1c78-dc79-408d-9c35-d2ae928b8ec8@w34g2000yqm.googlegroups.com>
Source record: 3136

On Mar 12, 5:50 pm, JIMMIE <jimmi...@gmail.com> wrote:
> I would like to experiment with some magnetic amplifier circuits but I
> havent been able to find any practical circuits I could build. I am
> interested in relalitively small signal amplification of AF and
> possibly ultrasonic frequencies purely for educational purpose. I have
> a couple of transformers and wan to see what I can do with them.
>
> Jimmie

Hey OM:

I can see a great linear amp antenna output switch. I've been looking
for a cheap way to switch all that power and vacuum relays I don't
have in my junk box. I do have some T200's and FT240's. Using a small
DC voltage to saturate the core on and off, making the output coil
switch from a milli ohm resistance to thousands of ohms of impedance.
Sweet.
I know mag amps were used in audio applications, I can see a QRP rig
with no transistors or tubes. Using just toroids.
73 OM

de n8zu

284. Re: Magnetic Amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-13 19:49:02 UTC
From: JIMMIE <jimmie68@gmail.com>
Message-ID: <b5f2fb4c-7fb8-4f84-851d-4f79840d5d31@q11g2000yqh.googlegroups.com>
Source record: 3137

On Mar 13, 5:54 am, raypsi <RBorow...@gmail.com> wrote:
> On Mar 12, 5:50 pm, JIMMIE <jimmi...@gmail.com> wrote:
>
> > I would like to experiment with some magnetic amplifier circuits but I
> > havent been able to find any practical circuits I could build. I am
> > interested in relalitively small signal amplification of AF and
> > possibly ultrasonic frequencies purely for educational purpose. I have
> > a couple of transformers and wan to see what I can do with them.
>
> > Jimmie
>
> Hey OM:
>
> I can see a great linear amp antenna output switch. I've been looking
> for a cheap way to switch all that power and vacuum relays I don't
> have in my junk box. I do have some T200's and FT240's. Using a small
> DC voltage to saturate the core on and off, making the output coil
> switch from a milli ohm resistance to thousands of ohms of impedance.
> Sweet.
> I know mag amps were used in audio applications, I can see a QRP rig
> with no transistors or tubes. Using just toroids.
> 73 OM
>
> de n8zu

My experience with them has been limited to pulse amplifiers but I was
under the impression that they could also be used in a linear mode, at
least it seems I heard that some where. It would be neat to have a
stereo amp with no tubes or transistors. As far as QRP goes I dont
think they work well above 1 Mhz but that was best info I had 40 years
ago. With new core mixes it may be possible.

Jimmie

285. Grant Funding Search Scam

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-13 22:46:56 UTC
From: joeturn <joeturn2000@yahoo.com>
Message-ID: <af0b91fc-e2b8-41f3-8d93-b5dac98f41d5@41g2000yqf.googlegroups.com>
Source record: 3138

I was misled by a local tv broadcast stating a survey was done on
government grant assitance programs!!
Well it must have been a bought advertisement instead of a survey,it
pointed out certain sies to steer away from but also recommened this
one highly.

grantfundingsearch.com

The informercial said these people only charged a shipping fee! So I
jumped on the band wagon a free government grant to never have to
repay and all you had do was order the cd explaing the how to !!

I gave them my credit card information to charge my account $1.98
shipping. After recieving the CD it was a disappointment it only told
you to be proper and ernest and use request letter that would not be
shit canned!!

Not what I was looking for at all,I wanted specifics maybe something
I
could simply sign and be considered since soo much research had gone
into the program being offered!!

$1.98 well I felt decieved yet it was a cheap lesson and I forgot
about it!! Three months later I recieve a statement from
grantfundingsearch that my account was charged this time for $69.95
which after a call was told that I was put on a 7 day trail if I was
unsatisisfied I was to cancle my subscription!

I had to give the phone to my wife as I was not easily adjusting to
the DOT HEAD on the other end!! When I returned from a cooldown walk

>> The wife told me That Not only did I get scamed for the CD$1.98

yet I was charged for a membership fee of $69.95! The fine print gave
me a time limit to deny the charges or else they assumed I was
wanting
to become a member of this Scam Organization!

How low will they go well not only had I not advised them via email
or
a written statement, that I would be charged on a regular basis..Who
knows how much or for how long!! I hope the FEDS does there job here
and bust the chops of this scam, However I'm afraid to think it is
most likely a FERDERALLY backed SCam opperation >>ORGANIZED CRIME
rides again

286. Homebrew Double conversion tube receiver Not HBR

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-14 02:51:01 UTC
From: Jim <k0jkj@arrl.net>
Message-ID: <ed168150-ef46-4749-81fd-6d278093bcf1@e1g2000pra.googlegroups.com>
Source record: 3139

I recently acquired a HOME BREW double conversion 23 channel CB receiver, yes I now it's not a real boat anchor but given that it has 11 tubes plus several diodes , I thought I'd ask about it here. It looks very well made. I was hoping that some one would recognize it by tube line up. I have started drawing the schematic . It has the following tubes, 6EH7 (the RF amp) , 12AT7, 12AU7, 6BN8, 6HR6, 6BA6, 6BE6, 6GX6, 12AX7, 6AQ5, and an OA2. It has 6 RF and IF transformers.

The antenna is connected directly to an untuned transformer with the RF amp feed by a cap off the secondary. The first oscillator uses a 29305 Kc crystal for the first oscillator stage. So a simple change of crystal will put it on 10 meters AM. It has a “S meter” and what I suspect is a meter adj. pot on the back. There is a octal socket on the back labeled transmitter that has two lines jumped as well as a voltage divider with a large electrolytic to ground in the middle of the divider.

The tuning cap is three section with one section switched by a control on the front panel. The tuning cap is driven by a very nicely home made dial cord mechanism with a heavy flywheel. So far I have figured out the RF and audio gain controls. The other two front panels pots function are a question as well as the functions of four multi section toggle switches. With the filter caps being bad. I have not powered it up for more than two minutes.

Does anyone remember a home brew rig with these features HAM or CB? I would like to find a schematic if possible. As I am only about half way through drawing up one. I looked at the HBR site and it doesn't seem to match anything there. But given the limited 23 channel coverage (plus channels A-D) it looks like it's from the late 1960's or real early 1970's .

Thanks For any Info.

Jim

287. Re: Homebrew Double conversion tube receiver Not HBR

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-14 04:02:39 UTC
From: JIMMIE <jimmie68@gmail.com>
Message-ID: <415b578d-8a28-4f5d-bd67-018b89e0b40f@z1g2000yqn.googlegroups.com>
Source record: 3140

On Mar 13, 10:51 pm, Jim <k0...@arrl.net> wrote:
> I recently acquired a HOME BREW double conversion 23 channel CB
> receiver, yes I now it's not a real boat anchor but given that it has
> 11 tubes plus several diodes , I thought I'd ask about it here. It
> looks very well made. I was hoping that some one would recognize it
> by tube line up. I have started drawing the schematic . It has the
> following tubes, 6EH7 (the RF amp) , 12AT7, 12AU7, 6BN8, 6HR6, 6BA6,
> 6BE6, 6GX6, 12AX7, 6AQ5, and an OA2. It has 6 RF and IF
> transformers.
>
> The antenna is connected directly to an untuned transformer with the
> RF amp feed by a cap off the secondary. The first oscillator uses a
> 29305 Kc crystal for the first oscillator stage. So a simple change of
> crystal will put it on 10 meters AM. It has a “S meter” and what I
> suspect is a meter adj. pot on the back. There is a octal socket on
> the back labeled transmitter that has two lines jumped as well as a
> voltage divider with a large electrolytic to ground in the middle of
> the divider.
>
> The tuning cap is three section with one section switched by a
> control on the front panel. The tuning cap is driven by a very nicely
> home made dial cord mechanism with a heavy flywheel. So far I have
> figured out the RF and audio gain controls. The other two front
> panels pots function are a question as well as the functions of four
> multi section toggle switches. With the filter caps being bad. I have
> not powered it up for more than two minutes.
>
> Does anyone remember a home brew rig with these features HAM or CB? I
> would like to find a schematic if possible. As I am only about half
> way through drawing up one. I looked at the HBR site and it doesn't
> seem to match anything there. But given the limited 23 channel
> coverage (plus channels A-D) it looks like it's from the late 1960's
> or real early 1970's .
>
> Thanks For any Info.
>
> Jim

Maybe its a copy of a Browning Eagle CB. These were popular back
then, . I remember there were some people making a Super Eagle
transmitter back then. It had a 6146 final. I think the guy making
them was from Baxley Ga.

Jimmie

288. Re: Magnetic Amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-14 22:08:15 UTC
From: mikea <mikea@mikea.ath.cx>
Message-ID: <ffmt86-1kn2.ln1@mikea.ath.cx>
Source record: 3141

JIMMIE <jimmie68@gmail.com> wrote in
<b5f2fb4c-7fb8-4f84-851d-4f79840d5d31@q11g2000yqh.googlegroups.com>:
> On Mar 13, 5:54?am, raypsi <RBorow...@gmail.com> wrote:
>> On Mar 12, 5:50 pm, JIMMIE <jimmi...@gmail.com> wrote:
>>
>> > I would like to experiment with some magnetic amplifier circuits but I
>> > havent been able to find any practical circuits I could build. I am
>> > interested in relalitively small signal amplification of ?AF and
>> > possibly ultrasonic frequencies purely for educational purpose. I have
>> > a couple of transformers and wan to see what I can do with them.
>>
>> > Jimmie
>>
>> Hey OM:
>>
>> I can see a great linear amp antenna output switch. I've been looking
>> for a cheap way to switch all that power and vacuum relays I don't
>> have in my junk box. I do have some T200's and FT240's. Using a small
>> DC voltage to saturate the core on and off, making the output coil
>> switch from a milli ohm resistance to thousands of ohms of impedance.
>> Sweet.
>> I know mag amps were used in audio applications, I can see a QRP rig
>> with no transistors or tubes. Using just toroids.
>> 73 OM
>>
>> de n8zu
>
> My experience with them has been limited to pulse amplifiers but I was
> under the impression that they could also be used in a linear mode, at
> least it seems I heard that some where. It would be neat to have a
> stereo amp with no tubes or transistors. As far as QRP goes I dont
> think they work well above 1 Mhz but that was best info I had 40 years
> ago. With new core mixes it may be possible.

I worked on gear that used them when I was in the USAF. Pretty neat way
to regulate a DC PS.

--
When I hit a *nix workstation with an axe, I'm interacting with it.
It's not necessarily the sort of interaction contemplated by the
designers, but it _is_ interaction.

289. Re: Homebrew Double conversion tube receiver Not HBR

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-14 23:37:38 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <b595bb92-64bb-4709-846e-c27ee8355696@t3g2000yqa.googlegroups.com>
Source record: 3142

On Mar 14, 12:02 am, JIMMIE <jimmi...@gmail.com> wrote:
> On Mar 13, 10:51 pm, Jim <k0...@arrl.net> wrote:
>
>
>
> > I recently acquired a HOME BREW double conversion 23 channel CB
> > receiver, yes I now it's not a real boat anchor but given that it has
> > 11 tubes plus several diodes , I thought I'd ask about it here. It
> > looks very well made. I was hoping that some one would recognize it
> > by tube line up. I have started drawing the schematic . It has the
> > following tubes, 6EH7 (the RF amp) , 12AT7, 12AU7, 6BN8, 6HR6, 6BA6,
> > 6BE6, 6GX6, 12AX7, 6AQ5, and an OA2. It has 6 RF and IF
> > transformers.
>
> > The antenna is connected directly to an untuned transformer with the
> > RF amp feed by a cap off the secondary. The first oscillator uses a
> > 29305 Kc crystal for the first oscillator stage. So a simple change of
> > crystal will put it on 10 meters AM. It has a “S meter” and what I
> > suspect is a meter adj. pot on the back. There is a octal socket on
> > the back labeled transmitter that has two lines jumped as well as a
> > voltage divider with a large electrolytic to ground in the middle of
> > the divider.
>
> > The tuning cap is three section with one section switched by a
> > control on the front panel. The tuning cap is driven by a very nicely
> > home made dial cord mechanism with a heavy flywheel. So far I have
> > figured out the RF and audio gain controls. The other two front
> > panels pots function are a question as well as the functions of four
> > multi section toggle switches. With the filter caps being bad. I have
> > not powered it up for more than two minutes.
>
> > Does anyone remember a home brew rig with these features HAM or CB? I
> > would like to find a schematic if possible. As I am only about half
> > way through drawing up one. I looked at the HBR site and it doesn't
> > seem to match anything there. But given the limited 23 channel
> > coverage (plus channels A-D) it looks like it's from the late 1960's
> > or real early 1970's .
>
> > Thanks For any Info.
>
> > Jim
>
> Maybe its a copy of a Browning Eagle CB. These were popular back
> then, . I remember there were some people making a Super Eagle

> transmitter back then. It had a 6146 final. I think the guy making
> them was from Baxley Ga.
>
> Jimmie

Hey OM:

Multi Elmac used to be just down the street from where I worked and
they made a double conversion 9 tube receiver a model PMR-8. They sold
the S meter as an accessory.
Looks like 3 stages of IF. So 1 RF, 2 mixer, and 3 IF transformers.

73 OM
de n8zu

290. Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-17 22:56:43 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <b8ab8090-d338-4dfd-8857-6c49a4ec75a1@c36g2000yqn.googlegroups.com>
Source record: 3143

I have 3 mast mounted nuvistor pre amps less power supplies. I was looking for information on these to convert them to use on the 6 and 2 meter and 70cm ham bands. I may still have a power supply around but as of yet I havent been able to find it. The pre amps are mount in a somewhat egg shaped plastic container with twin lead connections on them. Im not sure of the manufacturer. Schematics on the amplifiers and power supplies would be nice. Directions on doing the mod would be great. There are plans for ham band nuvistor preamps around so if I could figure out what I have it shouldnt be that difficult to conver it to what I want. Besides that it will give me something to do with these old 6cw4s.

Jimmie

291. Was my fatehr's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-18 05:12:54 UTC
From: Robert casey <wa2ise@ix.netcom.com>
Message-ID: <Xns9BD1E1FB4B216wa2ise@69.16.185.252>
Source record: 3144

Looking thru a friend's Feb 2009 QST, saw an article on the W6TC "HBR" double conversion homebrew radio. Which my father may have built a copy of. I no longer have that radio, but looking at the pictures of teh sets in the QST article, it looks very similar to what my father built. I do remember that he used a 1.8MHz crystal for what might have been the 1st IF to 2nd IF conversion mixer. I also remember, in the mid 60's (I was in grammar school) getting this crystal for my father as an Xmas gift (well, I gave him money that he used to order the crystal, I would not have been old enough to know how to mail order stuff myself yet).

Anyway, did the HBR use a crystal of a frequency like this as a conversion local osc mixer? Or maybe the crystal wasn't in an oscillator circuit, but maybe as a bandpass filter?

292. Re: Was my fatehr's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-18 07:43:13 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <3151f9e3-fa2d-40f0-bdd0-49eba484eef0@w35g2000yqm.googlegroups.com>
Source record: 3145

On Mar 18, 1:12 am, Robert casey <wa2...@ix.netcom.com> wrote:
> Looking thru a friend's Feb 2009 QST, saw an article on the W6TC "HBR"
> double conversion homebrew radio. Which my father may have built a copy
> of. I no longer have that radio, but looking at the pictures of teh sets
> in the QST article, it looks very similar to what my father built. I do
> remember that he used a 1.8MHz crystal for what might have been the 1st IF
> to 2nd IF conversion mixer. I also remember, in the mid 60's (I was in
> grammar school) getting this crystal for my father as an Xmas gift (well, I
> gave him money that he used to order the crystal, I would not have been old
> enough to know how to mail order stuff myself yet).
>
> Anyway, did the HBR use a crystal of a frequency like this as a conversion
> local osc mixer? Or maybe the crystal wasn't in an oscillator circuit, but
> maybe as a bandpass filter?

I dont know about HBR but Bill Orr published plans for a radio like
that.
The radio was intended to be use with external down converter to cover
all
the ham bands.I think it was a pretty popular construction project for
a lot
of hams.

pmillet has copies of old copyright expired books and I think they
have a copy of Bill Orr"s
handbook that will have the plans I am talking about. You can download
the books for free.

Jimmie

293. Re: Was my fatehr's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-18 10:22:30 UTC
From: Unca Pete <radioconnection@cox.net>
Message-ID: <QX3wl.67367$FI5.20197@newsfe07.iad>
Source record: 3146

The HBRs were a series of receivers designed by the late
Ted Crosby, W6TC and published in QST during the late
50s and early 60s.

The design used plug-in coils for the osc and rf stages, and
they were double conversion designs, with a first IF of
1600 kc and a second IF of either 100 kc or 85 kc (when
using surplus ARC-5 IFTs.) The 1800 mc xtal you bought
your dad was used for the second coversion osc. to convert
the 1600 kc IF down to 100 kc. Many hams deviated from
the exact original IF frequencies (i.e. strong local BC
station on 1600 kc) which might explain why the xtal
was chosen for 1800 kc instead of 1500 or 1700.

I'm gathering parts to build a more updated version, using
half-lattice filters salvaged from Heath HR-10 receivers for a
first IF at 1682 kc.

Pete

294. Re: Was my father's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-19 01:24:06 UTC
From: Robert casey <wa2ise@ix.netcom.com>
Message-ID: <Xns9BD2BB30CC7EFwa2ise@69.16.185.252>
Source record: 3147

>
> The design used plug-in coils for the osc and rf stages, and
they were double conversion designs, with a first IF of
1600 kc and a second IF of either 100 kc or 85 kc (when
using surplus ARC-5 IFTs.) The 1800 mc xtal you bought
your dad was used for the second coversion osc. to convert
the 1600 kc IF down to 100 kc. Many hams deviated from
the exact original IF frequencies (i.e. strong local BC
station on 1600 kc) which might explain why the xtal
> was chosen for 1800 kc instead of 1500 or 1700.
>

We have a local mid power station at 1600KHz, WWRL, at my parents' house,
so my father might have wanted to avoid problems with it.

His radio had a bandswitch instead of plug in coils, and he'd receive
various broadcast SW stations. He wasn't a ham at the time just yet.

295. Re: Was my father's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-19 02:09:16 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <9085826d-e72a-4cbe-9493-ff92406d552b@q18g2000vbn.googlegroups.com>
Source record: 3148

On Mar 18, 9:24 pm, Robert casey <wa2...@ix.netcom.com> wrote:
> > The design used plug-in coils for the osc and rf stages, and
>
> they were double conversion designs, with a first IF of
> 1600 kc and a second IF of either 100 kc or 85 kc (when
> using surplus ARC-5 IFTs.) The 1800 mc xtal you bought
> your dad was used for the second coversion osc. to convert
> the 1600 kc IF down to 100 kc. Many hams deviated from
> the exact original IF frequencies (i.e. strong local BC
> station on 1600 kc) which might explain why the xtal
>
> > was chosen for 1800 kc instead of 1500 or 1700.
>
> We have a local mid power station at 1600KHz, WWRL, at my parents' house,
> so my father might have wanted to avoid problems with it.
>
> His radio had a bandswitch instead of plug in coils, and he'd receive
> various broadcast SW stations. He wasn't a ham at the time just yet.

I had a friend who was a retired engineer with GE turned TV tech who
built
one with a band switch and he later modified it to
be more of a general purpose SW receiver. His name was Olin Griggs.

Jimmie.

296. Re: Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-19 02:50:02 UTC
From: RFI-EMI-GUY <Rhyolite@NETTALLY.COM>
Message-ID: <49c1b2d6$0$4955$9a6e19ea@unlimited.newshosting.com>
Source record: 3149

JIMMIE wrote:
> I have 3 mast mounted nuvistor pre amps less power supplies. I was
> looking for information on these to convert them to use on the 6 and 2
> meter and 70cm ham bands. I may still have a power supply around but
> as of yet I havent been able to find it. The pre amps are mount in a
> somewhat egg shaped plastic container with twin lead connections on
> them. Im not sure of the manufacturer. Schematics on the amplifiers
> and power supplies would be nice. Directions on doing the mod would be
> great. There are plans for ham band nuvistor preamps around so if I
> could figure out what I have it shouldnt be that difficult to conver
> it to what I want. Besides that it will give me something to do with
> these old 6cw4s.
>
>
> Jimmie

You would do good to find a 70's or earlier ARRL handbook. There were
many articles about Nuvistors.

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Use only Genuine Interocitor Parts" Tom Servo ;-P

297. Re: Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-19 12:20:28 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <957da915-f5ac-40f5-b98c-b755b8cc4c35@l16g2000yqo.googlegroups.com>
Source record: 3150

On Mar 18, 10:50 pm, RFI-EMI-GUY <Rhyol...@NETTALLY.COM> wrote:
> JIMMIE wrote:
> > I have 3 mast mounted nuvistor pre amps less power supplies. I was
> > looking for information on these to convert them to use on the 6 and 2
> > meter and 70cm ham bands. I may still have a power supply around but
> > as of yet I havent been able to find it. The pre amps are mount in a
> > somewhat egg shaped plastic container with twin lead connections on
> > them. Im not sure of the manufacturer. Schematics on the amplifiers
> > and power supplies would be nice. Directions on doing the mod would be
> > great. There are plans for ham band nuvistor preamps around so if I
> > could figure out what I have it shouldnt be that difficult to conver
> > it to what I want. Besides that it will give me something to do with
> > these old 6cw4s.
>
> > Jimmie
>
> You would do good to find a 70's or earlier ARRL handbook. There were
> many articles about Nuvistors.
>
> --
> Joe Leikhim K4SAT
> "The RFI-EMI-GUY"©
>
> "Use only Genuine Interocitor Parts" Tom Servo ;-P

I used to have access to the handbooks of the 60s and early 70s. I
thought those were some of the best years. Im always on the lookout
for some but it seems a lot of other people share my opinion and dont
want to part with them.

Jimmie

298. Re: Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-20 13:33:57 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <0bb2cc98-ce0d-4a9d-b8ae-3b6da8783f2c@w9g2000yqa.googlegroups.com>
Source record: 3201

On Mar 19, 8:20 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> On Mar 18, 10:50 pm, RFI-EMI-GUY <Rhyol...@NETTALLY.COM> wrote:
>
>
>
> > JIMMIE wrote:
> > > I have 3 mast mounted nuvistor pre amps less power supplies. I was
> > > looking for information on these to convert them to use on the 6 and 2
> > > meter and 70cm ham bands. I may still have a power supply around but
> > > as of yet I havent been able to find it. The pre amps are mount in a
> > > somewhat egg shaped plastic container with twin lead connections on
> > > them. Im not sure of the manufacturer. Schematics on the amplifiers
> > > and power supplies would be nice. Directions on doing the mod would be
> > > great. There are plans for ham band nuvistor preamps around so if I
> > > could figure out what I have it shouldnt be that difficult to conver
> > > it to what I want. Besides that it will give me something to do with
> > > these old 6cw4s.
>
> > > Jimmie
>
> > You would do good to find a 70's or earlier ARRL handbook. There were
> > many articles about Nuvistors.
>
> > --
> > Joe Leikhim K4SAT
> > "The RFI-EMI-GUY"©
>
> > "Use only Genuine Interocitor Parts" Tom Servo ;-P
>
> I used to have access to the handbooks of the 60s and early 70s. I
> thought those were some of the best years. Im always on the lookout
> for some but it seems a lot of other people share my opinion and dont
> want to part with them.
>
> Jimmie

Hey OM:

Really though sounds like you have low and high band VHF wideband
preamps for maybe TV use. The low band being 54 to 88 MHz and the
high band is 174 MHz to 230 MHz. So 6 and 2 meters is doable.

I don't know if you could squeeze UHF out of them, 6cw4s' input C is
way to high.
In tube TV's they used 6af4's for the UHF band half the input C of a

6cw4. And even that was a oscillator not a preamp.

73 OM

de n8zu

299. Re: Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-20 14:23:13 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <426c859e-943c-4b09-86b8-32458300ff16@j8g2000yql.googlegroups.com>
Source record: 3202

On Mar 19, 8:20 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> On Mar 18, 10:50 pm, RFI-EMI-GUY <Rhyol...@NETTALLY.COM> wrote:
>
>
>
>
>
> > JIMMIE wrote:
> > > I have 3 mast mounted nuvistor pre amps less power supplies. I was
> > > looking for information on these to convert them to use on the 6 and 2
> > > meter and 70cm ham bands. I may still have a power supply around but
> > > as of yet I havent been able to find it. The pre amps are mount in a
> > > somewhat egg shaped plastic container with twin lead connections on
> > > them. Im not sure of the manufacturer. Schematics on the amplifiers
> > > and power supplies would be nice. Directions on doing the mod would be
> > > great. There are plans for ham band nuvistor preamps around so if I
> > > could figure out what I have it shouldnt be that difficult to conver
> > > it to what I want. Besides that it will give me something to do with
> > > these old 6cw4s.
>
> > > Jimmie
>
> > You would do good to find a 70's or earlier ARRL handbook. There were
> > many articles about Nuvistors.
>
> > --
> > Joe Leikhim K4SAT
> > "The RFI-EMI-GUY"©
>
> > "Use only Genuine Interocitor Parts" Tom Servo ;-P
>
> I used to have access to the handbooks of the 60s and early 70s. I
> thought those were some of the best years. Im always on the lookout
> for some but it seems a lot of other people share my opinion and dont
> want to part with them.

They aren't that hard to find :-). The early-mid-60's handbooks would
be your best bet for finding Nuvistor construction articles.

But what you really want is to look up the 60's QST articles on
Nuvistor based preamps:

Sep 1960: Nuvistor as an RF Amplifier at 144 Mc
Jan 1961: K1IJB Nuvistor Preamplifier
Aug 1961: Nuvistor Preamplifiers for 50 and 144 Mc

Jul 1962: Nuvistor Converter for 220 Mc
Jul 1962: Improving Performance of Nuvistor 144 Mc converters
Aug 1962: Using the QST Nuvistor Converters with Amateur-Bands only receivers
Jan 1963: An All-Nuvistor Convertor for 420 Mc
Apr 1963: Two Nuvistor Converters for 220 Mc
May 1963: Nuvistor Goes Mobile on 50 Mc

If you get the impression that early 60's was the peak for Nuvistor usage, you'd be about right. The August 61 article is IMHO the definitive one on preamp usage.

For using a TV preamp, all you'd want to do is remove any traps that get rid of the ham bands. But you'd do much better with tuned input circuit for only the ham band of interest.

You can download all the above for free from the ARRL if you log in with your member ID. With all the old QST's available on the web, everyone ought to be a member!

Tim N3QE

300. Re: Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-20 18:39:20 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <78e32262-e7a5-40b2-ba2e-48869ad86430@r18g2000vbi.googlegroups.com>
Source record: 3203

On Mar 20, 9:33 am, raypsi <RBorow...@gmail.com> wrote:
> On Mar 19, 8:20 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
>
>
>
>
>
> > On Mar 18, 10:50 pm, RFI-EMI-GUY <Rhyol...@NETTALLY.COM> wrote:
>
> > > JIMMIE wrote:
> > > > I have 3 mast mounted nuvistor pre amps less power supplies. I was
> > > > looking for information on these to convert them to use on the 6 and 2
> > > > meter and 70cm ham bands. I may still have a power supply around but
> > > > as of yet I havent been able to find it. The pre amps are mount in a
> > > > somewhat egg shaped plastic container with twin lead connections on
> > > > them. Im not sure of the manufacturer. Schematics on the amplifiers
> > > > and power supplies would be nice. Directions on doing the mod would be
> > > > great. There are plans for ham band nuvistor preamps around so if I
> > > > could figure out what I have it shouldnt be that difficult to conver
> > > > it to what I want. Besides that it will give me something to do with
> > > > these old 6cw4s.
>
> > > > Jimmie
>
> > > You would do good to find a 70's or earlier ARRL handbook. There were
> > > many articles about Nuvistors.
>
> > > --
> > > Joe Leikhim K4SAT
> > > "The RFI-EMI-GUY"©
>
> > > "Use only Genuine Interocitor Parts" Tom Servo ;-P
>
> > I used to have access to the handbooks of the 60s and early 70s. I
> > thought those were some of the best years. Im always on the lookout
> > for some but it seems a lot of other people share my opinion and dont
> > want to part with them.
>
> > Jimmie
>
> Hey OM:
>
> Really though sounds like you have low and high band VHF wideband
> preamps for maybe TV use. The low band being 54 to 88 MHz and the

> high band is 174 MHz to 230 MHz. So 6 and 2 meters is doable.
>
> I don't know if you could squeeze UHF out of them, 6cw4s' input C is
> way to high.
> In tube TV's they used 6af4's for the UHF band half the input C of a
> 6cw4. And even that was a oscillator not a preamp.
>
> 73 OM
>
> de n8zu- Hide quoted text -
>
> - Show quoted text -

6cw4s may not be what is in the amps but I do have a few and a few others. I thik the 6cw4s were something I bought for a project and the others are left over from when I worked on TVs back in the early 70s. They are probably the right kind. Im pretty sure I kept these preamps because they worked because at one time I had a bushel of them most of which had a fair amount of lightning damage.

Jimmie

301. Re: Was my father's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-20 22:47:25 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <bRVwl.18562$b9.1772@bignews6.bellsouth.net>
Source record: 3204

JIMMIE wrote:
> On Mar 18, 9:24 pm, Robert casey <wa2...@ix.netcom.com> wrote:
>>> The design used plug-in coils for the osc and rf stages, and
>> they were double conversion designs, with a first IF of
>> 1600 kc and a second IF of either 100 kc or 85 kc (when
>> using surplus ARC-5 IFTs.) The 1800 mc xtal you bought
>> your dad was used for the second coversion osc. to convert
>> the 1600 kc IF down to 100 kc. Many hams deviated from
>> the exact original IF frequencies (i.e. strong local BC
>> station on 1600 kc) which might explain why the xtal
>>
>>> was chosen for 1800 kc instead of 1500 or 1700.
>> We have a local mid power station at 1600KHz, WWRL, at my parents' house,
>> so my father might have wanted to avoid problems with it.
>>
>> His radio had a bandswitch instead of plug in coils, and he'd receive
>> various broadcast SW stations. He wasn't a ham at the time just yet.
>
> I had a friend who was a retired engineer with GE turned TV tech who
> built
> one with a band switch and he later modified it to
> be more of a general purpose SW receiver. His name was Olin Griggs.
>
>
> Jimmie.
I once saw an article in 73 magazine showing a HB receiver that used a
re-worked turret tv tuner as a band switch. The coils were re-wound
onto the original forms, but some have just replaced the forms with some
of the smaller sized toroid cores. I have a bunch of old tv tuners in
the junk box, but over the years the contacts have gone bad and now show
a high resistance. Maybe they could be cleaned up, but it no longer
seems worth the effort. My new idea is to use miniature relays to
switch the circuits. I recently found nearly a gross of small relays
for free so why not?

302. Icom R1500 USB driver, intermittent, audio dead

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-21 00:07:20 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <3dWwl.14783$W06.8779@flpi148.ffdc.sbc.com>
Source record: 3205

Hello Folks,

Has anyone ever had this happen and maybe knows what could be wrong?

The Icom R1500 behaves like a PCR1500 when controlled via the PC. Or so says Icom. When I try to control it through the virtual COM3 port via USB it seems to have lots of data traffic jams. If I turn the "virtual" dial too fast the R1500 seems to lag. Sometimes it doesn't react at all and seconds later starts slowly tuning through all the frequencies I had chosen. This can go on for half a minute until it has trundled out.

Audio is supposed to go via the same USB cable but not as a serial COM port. Well, that part doesn't work at all, no audio.

--
73, Joerg

303. Re: Was my father's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-21 01:06:30 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <x4Xwl.24362$yr3.21444@nlpi068.nbdc.sbc.com>
Source record: 3206

ken scharf wrote:
> JIMMIE wrote:
>> On Mar 18, 9:24 pm, Robert casey <wa2...@ix.netcom.com> wrote:
>>>> The design used plug-in coils for the osc and rf stages, and
>>> they were double conversion designs, with a first IF of
>>> 1600 kc and a second IF of either 100 kc or 85 kc (when
>>> using surplus ARC-5 IFTs.) The 1800 mc xtal you bought
>>> your dad was used for the second coversion osc. to convert
>>> the 1600 kc IF down to 100 kc. Many hams deviated from
>>> the exact original IF frequencies (i.e. strong local BC
>>> station on 1600 kc) which might explain why the xtal
>>>
>>>> was chosen for 1800 kc instead of 1500 or 1700.
>>> We have a local mid power station at 1600KHz, WWRL, at my parents'
>>> house,
>>> so my father might have wanted to avoid problems with it.
>>>
>>> His radio had a bandswitch instead of plug in coils, and he'd receive
>>> various broadcast SW stations. He wasn't a ham at the time just yet.
>>
>> I had a friend who was a retired engineer with GE turned TV tech who
>> built
>> one with a band switch and he later modified it to
>> be more of a general purpose SW receiver. His name was Olin Griggs.
>>
>>
>> Jimmie.
> I once saw an article in 73 magazine showing a HB receiver that used a
> re-worked turret tv tuner as a band switch. The coils were re-wound
> onto the original forms, but some have just replaced the forms with some
> of the smaller sized toroid cores. I have a bunch of old tv tuners in
> the junk box, but over the years the contacts have gone bad and now show
> a high resistance. Maybe they could be cleaned up, but it no longer
> seems worth the effort. My new idea is to use miniature relays to
> switch the circuits. I recently found nearly a gross of small relays
> for free so why not?

Relays will most likely bring some grief over the years with contacts
not conducting 100% and such. Better use band switching diodes or PIN
diodes.

--
Regards, Joerg

http://www.analogconsultants.com/

"gmail" domain blocked because of excessive spam.
Use another domain or send PM.

304. Re: Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-21 01:09:12 UTC
From: Unca Pete <radioconnection@cox.net>
Message-ID: <d7Xwl.30779$5t4.22583@newsfe24.iad>
Source record: 3207

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message news:426c859e-943c
You can download all the above for free from the ARRL if you log in
with your member ID. With all the old QST's available on the web,
everyone ought to be a member!

Tim N3QE

I'll join the ARRL the day I can choose QEX over the QST
forced subscription that comes with the membership.

Pete k1zjh

305. Re: Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-21 13:46:03 UTC
From: Lawrence Statton <yankeeinexile@gmail.com>
Message-ID: <m1iqm3t2ec.fsf@mac.gateway.2wire.net>
Source record: 3208

"Unca Pete" <radioconnection@cox.net> writes:
>
> I'll join the ARRL the day I can choose QEX over the QST
> forced subscription that comes with the membership.
>
> Pete k1zjh

Have you ever thought of JOINING ARRL, and using your position as
a member to petition for this change?

Change is made by those who participate.

--N1GAK

306. Re: Was my father's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-21 14:24:44 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <gG6xl.18580$v8.3165@bignews3.bellsouth.net>
Source record: 3209

Joerg wrote:
> ken scharf wrote:
>> JIMMIE wrote:
>>> On Mar 18, 9:24 pm, Robert casey <wa2...@ix.netcom.com> wrote:
>>>>> The design used plug-in coils for the osc and rf stages, and
>>>> they were double conversion designs, with a first IF of
>>>> 1600 kc and a second IF of either 100 kc or 85 kc (when
>>>> using surplus ARC-5 IFTs.) The 1800 mc xtal you bought
>>>> your dad was used for the second coversion osc. to convert
>>>> the 1600 kc IF down to 100 kc. Many hams deviated from
>>>> the exact original IF frequencies (i.e. strong local BC
>>>> station on 1600 kc) which might explain why the xtal
>>>>
>>>>> was chosen for 1800 kc instead of 1500 or 1700.
>>>> We have a local mid power station at 1600KHz, WWRL, at my parents'
>>>> house,
>>>> so my father might have wanted to avoid problems with it.
>>>>
>>>> His radio had a bandswitch instead of plug in coils, and he'd receive
>>>> various broadcast SW stations. He wasn't a ham at the time just yet.
>>>
>>> I had a friend who was a retired engineer with GE turned TV tech who
>>> built
>>> one with a band switch and he later modified it to
>>> be more of a general purpose SW receiver. His name was Olin Griggs.
>>>
>>>
>>> Jimmie.
>> I once saw an article in 73 magazine showing a HB receiver that used a
>> re-worked turret tv tuner as a band switch. The coils were re-wound
>> onto the original forms, but some have just replaced the forms with some
>> of the smaller sized toroid cores. I have a bunch of old tv tuners in
>> the junk box, but over the years the contacts have gone bad and now show
>> a high resistance. Maybe they could be cleaned up, but it no longer
>> seems worth the effort. My new idea is to use miniature relays to
>> switch the circuits. I recently found nearly a gross of small relays
>> for free so why not?
>
>
> Relays will most likely bring some grief over the years with contacts
> not conducting 100% and such. Better use band switching diodes or PIN
> diodes.
>
There is a trick with relays, they must conduct a minimum amount of

current or the contacts won't self clean. Using relays to switch receiver input circuits that are only passing micro amps will eventually cause problems. But, if you bias the circuits with some resistors so the relay must switch at least a few milliamps they will last longer. Another idea if the relays are computer controlled would be to switch in a high current source (few hundred ma) before opening or closing the desired relays, then switch off the high current source. Relays should not be any worse than switches as far as contacts go, however rotary switches would tend to be self cleaning due to the wiping action. Relays are often used in switching low pass filers used after solid state finals. Here they ARE carrying high current (rf output) but not switching it.

307. Re: Was my father's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-21 14:50:19 UTC
From: Highland Ham <rfburns@allbands.net>
Message-ID: <pPadncoJ-fINY1nUnZ2dnUVZ8gyWnZ2d@pipex.net>
Source record: 3210

```
>> Relays will most likely bring some grief over the years with contacts
>> not conducting 100% and such. Better use band switching diodes or PIN
>> diodes.
>>
> There is a trick with relays, they must conduct a minimum amount of
> current or the contacts won't self clean. Using relays to switch
> receiver input circuits that are only passing micro amps will eventually
> cause problems. But, if you bias the circuits with some resistors so
> the relay must switch at least a few milliamps they will last longer.
> Another idea if the relays are computer controlled would be to switch in
> a high current source (few hundred ma) before opening or closing the
> desired relays, then switch off the high current source. Relays should
> not be any worse than switches as far as contacts go, however rotary
> switches would tend to be self cleaning due to the wiping action.
> Relays are often used in switching low pass filers used after solid
> state finals. Here they ARE carrying high current (rf output) but not
> switching it.
==========================================
Had this relay switching problem with my (almost vintage) Ten Tec
Paragon trx (AD 1988) a few years ago and ordered a relay from TenTec ,
but never had to change ,because the original relay cleared itself.
Would suggest to operate an 'ailing' rx relay a number of times ,eg
10-20 times within a short period ; its contact(s) might then clear itself.

Frank GM0CSZ / KN6WH
```

308. Re: Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-21 14:57:09 UTC
From: Highland Ham <rfburns@allbands.net>
Message-ID: <Vf2dnWcdK-q1nVjUnZ2dnUVZ8tOWnZ2d@pipex.net>
Source record: 3211

Unca Pete wrote:
> "Tim Shoppa" <shoppa@trailing-edge.com> wrote in message news:426c859e-943c
> You can download all the above for free from the ARRL if you log in
> with your member ID. With all the old QST's available on the web,
> everyone ought to be a member!
>
> Tim N3QE
>
> I'll join the ARRL the day I can choose QEX over the QST
> forced subscription that comes with the membership.
>
> Pete k1zjh
>==========
Have you ever thought of JOINING ARRL, and using your position as
a member to petition for this change?

Change is made by those who participate.

--N1GAK
==========
Agree with that ,although ARRL members should have a choice.
If they prefer QEX over QST they should have that option.
ARRL news is sent weekly by e-mail upon request .Moreover, members can
access QST articles via the ARRL web site, and also can access QEX articles.

Living in the UK I have opted for the annual CD-ROM ,which is published
in March ,including QST , QEX and the Contest Mag. covering the past
calendar year ,which suits me fine.
However I believe this option is not available to US residents .
Perhaps something to go for.

Frank GM0CSZ / KN6WH

309. Re: Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-21 15:33:47 UTC
From: Unca Pete <radioconnection@cox.net>
Message-ID: <NN7xI.71073$Tp5.62094@newsfe13.iad>
Source record: 3212

"Lawrence Statton" <yankeeinexile@gmail.com> wrote in message
news:m1iqm3t2ec.fsf@mac.gateway.2wire.net...
> "Unca Pete" <radioconnection@cox.net> writes:
>> > Have you ever thought of JOINING ARRL, and using your position as
> a member to petition for this change?
>
> Change is made by those who participate.
>
> --N1GAK

The name of the game is $$$$$.

They'd lose advertising revenues if folks were given the
choice. I vote with my WALLET; and I let them know it.
QST has been dumbed down to meet the needs of the
new 2x1 callsign holders--the ones who can't figure the
out how make a dipole or solder a PL-259. And the
fact they destroyed the competition (Communications
Quarterly) doesn't sit well with many of us.

Pete k1zjh

310. Re: Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-21 17:23:11 UTC
From: mikea <mikea@mikea.ath.cx>
Message-ID: <vckf96-mcd2.ln1@mikea.ath.cx>
Source record: 3213

Highland Ham <rfburns@allbands.net> wrote in <Vf2dnWcdK-q1nVjUnZ2dnUVZ8tOWnZ2d@pipex.net>:
> Unca Pete wrote:
>> "Tim Shoppa" <shoppa@trailing-edge.com> wrote in message news:426c859e-943c
>> You can download all the above for free from the ARRL if you log in
>> with your member ID. With all the old QST's available on the web,
>> everyone ought to be a member!
>>
>> Tim N3QE
>>
>> I'll join the ARRL the day I can choose QEX over the QST
>> forced subscription that comes with the membership.
>>
>> Pete k1zjh
>>==========
> Have you ever thought of JOINING ARRL, and using your position as
> a member to petition for this change?
>
> Change is made by those who participate.
>
> --N1GAK
> ==========
> Agree with that ,although ARRL members should have a choice.
> If they prefer QEX over QST they should have that option.
> ARRL news is sent weekly by e-mail upon request .Moreover, members can
> access QST articles via the ARRL web site, and also can access QEX articles.

Erm ... while I dislike contradicting you directly, I just tried to download a
QEX article, afer logging in to my ARRL.net account, and got the following:

: The ARRL Periodicals Archive and Search is both an index of articles and an archive of
downloadable material. However, not everything in the index is available for download.
:
: The item you requested is not in the archive of downloadable information. This may be
because:
:
: * Most QST material newer than 2005 is not available for download
: * QEX, NCJ and Ham Radio material is not available for download

I subscribe to QEX as well as QST, and really would like QEX to be downloadable.
I see in my future a letter to the Powers That Be.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

311. Re: Was my father's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-21 19:46:06 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <bubxl.10257$jZ1.9376@flpi144.ffdc.sbc.com>
Source record: 3214

ken scharf wrote:
> Joerg wrote:
>> ken scharf wrote:
>>> JIMMIE wrote:
>>>> On Mar 18, 9:24 pm, Robert casey <wa2...@ix.netcom.com> wrote:
>>>>>> The design used plug-in coils for the osc and rf stages, and
>>>>> they were double conversion designs, with a first IF of
>>>>> 1600 kc and a second IF of either 100 kc or 85 kc (when
>>>>> using surplus ARC-5 IFTs.) The 1800 mc xtal you bought
>>>>> your dad was used for the second coversion osc. to convert
>>>>> the 1600 kc IF down to 100 kc. Many hams deviated from
>>>>> the exact original IF frequencies (i.e. strong local BC
>>>>> station on 1600 kc) which might explain why the xtal
>>>>>
>>>>>> was chosen for 1800 kc instead of 1500 or 1700.
>>>>> We have a local mid power station at 1600KHz, WWRL, at my parents'
>>>>> house,
>>>>> so my father might have wanted to avoid problems with it.
>>>>>
>>>>> His radio had a bandswitch instead of plug in coils, and he'd receive
>>>>> various broadcast SW stations. He wasn't a ham at the time just yet.
>>>>
>>>> I had a friend who was a retired engineer with GE turned TV tech who
>>>> built
>>>> one with a band switch and he later modified it to
>>>> be more of a general purpose SW receiver. His name was Olin Griggs.
>>>>
>>>>
>>>> Jimmie.
>>> I once saw an article in 73 magazine showing a HB receiver that used
>>> a re-worked turret tv tuner as a band switch. The coils were
>>> re-wound onto the original forms, but some have just replaced the
>>> forms with some
>>> of the smaller sized toroid cores. I have a bunch of old tv tuners in
>>> the junk box, but over the years the contacts have gone bad and now show
>>> a high resistance. Maybe they could be cleaned up, but it no longer
>>> seems worth the effort. My new idea is to use miniature relays to
>>> switch the circuits. I recently found nearly a gross of small relays
>>> for free so why not?
>>
>>
>> Relays will most likely bring some grief over the years with contacts
>> not conducting 100% and such. Better use band switching diodes or PIN
>> diodes.

>>
> There is a trick with relays, they must conduct a minimum amount of
> current or the contacts won't self clean. Using relays to switch
> receiver input circuits that are only passing micro amps will eventually
> cause problems. But, if you bias the circuits with some resistors so
> the relay must switch at least a few milliamps they will last longer.
> Another idea if the relays are computer controlled would be to switch in
> a high current source (few hundred ma) before opening or closing the
> desired relays, then switch off the high current source. Relays should
> not be any worse than switches as far as contacts go, however rotary
> switches would tend to be self cleaning due to the wiping action.
> Relays are often used in switching low pass filers used after solid
> state finals. Here they ARE carrying high current (rf output) but not
> switching it.

Yeah, I wish the designers of the NRD-515 here had known that as well.
Every few months a relay will become "sticky". The S-meter drops to
zilch, rock the attenuator switch 5-10 times, and it's back :-(

Relays with some current are ok but I prefer the electronic method. PIN
diodes with lots of current and plenty of carrier lifetime usually work.
One just has to make sure there aren't any rectification effects that
can cause IM or harmonics in the presence of strong signals. FET
switches are sometimes a good deal as well but since the SD5000 and
SD5400 have gone towards high-priced boutique status not so much anymore.

--
73, Joerg

312. Re: Was my father's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-21 20:58:04 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <9364817a-7a42-475a-a510-a974d4cd16fb@r28g2000vbp.googlegroups.com>
Source record: 3215

On Mar 20, 6:47 pm, ken scharf <wa2mzeNOSPAMB...@bellsouth.net> wrote:
> JIMMIE wrote:
> > On Mar 18, 9:24 pm, Robert casey <wa2...@ix.netcom.com> wrote:
> >>> The design used plug-in coils for the osc and rf stages, and
> >> they were double conversion designs, with a first IF of
> >> 1600 kc and a second IF of either 100 kc or 85 kc (when
> >> using surplus ARC-5 IFTs.) The 1800 mc xtal you bought
> >> your dad was used for the second coversion osc. to convert
> >> the 1600 kc IF down to 100 kc. Many hams deviated from
> >> the exact original IF frequencies (i.e. strong local BC
> >> station on 1600 kc) which might explain why the xtal
>
> >>> was chosen for 1800 kc instead of 1500 or 1700.
> >> We have a local mid power station at 1600KHz, WWRL, at my parents' house,
> >> so my father might have wanted to avoid problems with it.
>
> >> His radio had a bandswitch instead of plug in coils, and he'd receive
> >> various broadcast SW stations. He wasn't a ham at the time just yet.
>
> > I had a friend who was a retired engineer with GE turned TV tech who
> > built
> > one with a band switch and he later modified it to
> > be more of a general purpose SW receiver. His name was Olin Griggs.
>
> > Jimmie.
>
> I once saw an article in 73 magazine showing a HB receiver that used a
> re-worked turret tv tuner as a band switch. The coils were re-wound
> onto the original forms, but some have just replaced the forms with some
> of the smaller sized toroid cores. I have a bunch of old tv tuners in
> the junk box, but over the years the contacts have gone bad and now show
> a high resistance.   Maybe they could be cleaned up, but it no longer
> seems worth the effort. My new idea is to use miniature relays to
> switch the circuits. I recently found nearly a gross of small relays
> for free so why not?- Hide quoted text -
>
> - Show quoted text -

I tried the TV tuner trick one time and it didnt work well at all.
Most tuners are tossed because the contacts fail. Various contact
cleaners will only help for a while because wor out is worn out and
there is not a long term fix you can do for them. The exception to
this was a very old one I found that was at least as big or bigger
than a shoe box. Shame on me but I used one like this to build my own

CB radio tx. I was using it to switch crystals and trimmer caps for the osc.

Jimmie

313. Re: Was my father's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-21 21:11:21 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <6Kcxl.24422$yr3.18211@nlpi068.nbdc.sbc.com>
Source record: 3216

JIMMIE wrote:
> On Mar 20, 6:47 pm, ken scharf <wa2mzeNOSPAMB...@bellsouth.net> wrote:
>> JIMMIE wrote:
>>> On Mar 18, 9:24 pm, Robert casey <wa2...@ix.netcom.com> wrote:
>>>>> The design used plug-in coils for the osc and rf stages, and
>>>> they were double conversion designs, with a first IF of
>>>> 1600 kc and a second IF of either 100 kc or 85 kc (when
>>>> using surplus ARC-5 IFTs.) The 1800 mc xtal you bought
>>>> your dad was used for the second coversion osc. to convert
>>>> the 1600 kc IF down to 100 kc. Many hams deviated from
>>>> the exact original IF frequencies (i.e. strong local BC
>>>> station on 1600 kc) which might explain why the xtal
>>>>> was chosen for 1800 kc instead of 1500 or 1700.
>>>> We have a local mid power station at 1600KHz, WWRL, at my parents' house,
>>>> so my father might have wanted to avoid problems with it.
>>>> His radio had a bandswitch instead of plug in coils, and he'd receive
>>>> various broadcast SW stations. He wasn't a ham at the time just yet.
>>> I had a friend who was a retired engineer with GE turned TV tech who
>>> built
>>> one with a band switch and he later modified it to
>>> be more of a general purpose SW receiver. His name was Olin Griggs.
>>> Jimmie.
>> I once saw an article in 73 magazine showing a HB receiver that used a
>> re-worked turret tv tuner as a band switch. The coils were re-wound
>> onto the original forms, but some have just replaced the forms with some
>> of the smaller sized toroid cores. I have a bunch of old tv tuners in
>> the junk box, but over the years the contacts have gone bad and now show
>> a high resistance. Maybe they could be cleaned up, but it no longer
>> seems worth the effort. My new idea is to use miniature relays to
>> switch the circuits. I recently found nearly a gross of small relays
>> for free so why not?- Hide quoted text -
>>
>> - Show quoted text -
>
> I tried the TV tuner trick one time and it didnt work well at all.
> Most tuners are tossed because the contacts fail. ...

Not really. Back then TVs were often tossed because the flyback xfmr had
blown and repair was deemed uneconomical. Or someone said that because
in reality they wanted that brand spanking new set that was one sale.

But this is so long ago that if there's any left the contacts will have
corrodes away.

[...]

--
73, Joerg

314. Re: Was my father's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-21 21:21:35 UTC
From: AF6AY <LenAnderson@ieee.org>
Message-ID: <6ebc24d7-9c72-46c5-bcb4-b7b7dd4c459c@z6g2000pre.googlegroups.com>
Source record: 3217

"Joerg" posted on Fri, Mar 20 2009 6:06 pm

>ken scharf wrote:
>> JIMMIE wrote:
>>> On Mar 18, 9:24 pm, Robert casey <wa2...@ix.netcom.com> wrote:

>> I once saw an article in 73 magazine showing a HB receiver that used a
>> re-worked turret tv tuner as a band switch. The coils were re-wound
>> onto the original forms, but some have just replaced the forms with some
>> of the smaller sized toroid cores. I have a bunch of old tv tuners in
>> the junk box, but over the years the contacts have gone bad and now show
>> a high resistance. Maybe they could be cleaned up, but it no longer
>> seems worth the effort. My new idea is to use miniature relays to
>> switch the circuits. I recently found nearly a gross of small relays
>> for free so why not?
>
>Relays will most likely bring some grief over the years with contacts
>not conducting 100% and such. Better use band switching diodes or PIN
>diodes.

I disagree based on some experience in environmentally testing relays
ranging from high-power to low-power to 'choppers' in so-called
stabilized
(DC) amplifiers for military avionics, then doing comparative testing
against the cheaper commercial relay designs on the market over 50
years
ago.

About the only "grief" is one can get is failure to wire it correctly
or
not understanding what relay contacts acually do or how to power their
actuating coils.

Power relays CAN result in contact pitting and poor resistance as a
result
of many multiple activations while carrying inductive loads of many
Amperes of current with resulting very high voltage back-EMF
('flyback')
conditions on contact separation. That is NOT the case with receiver
bandswitching applications. Not even close.

There are some unusual contact effects in so-called "dry" circuits
carrying femtoAmpere currents or less but those won't affect high-
impedance input and output circuits common to vacuum tubes. One of
the
better choices for no-nonsense, easier to implement bandswitch

conversions without much cost is to use modern, easy-to-get small relays
requiring only 100 to 150 mW coil powers, available in coil operating
voltage increments of 6, 12, 18, 24 VDC...or, if salvaging older tube
equipment, the "plate relays" of a half century ago designed for higher
12 to 30 VDC, comparable powers for a few mA of plate current in coils.
[much harder to get now given all electronics is firmly in the solid-
state era starting over 40 years ago] Some relay makers, such as
Omron, are widely used in electronics, especially for automotive
applications and are found listed in all major distributor catalogs.

Relay contacts can easily withstand 200 to 400 VDC stock of now v. old
(half-century ago). The make or break contacts do NOT involve any
unusual RF impedance characteristics other than a few pFd of capacitance
equivalent to ordinary point-to-point wiring or the lead-length
inductance of some short point-to-point wire inductance in the low
nanoHy range. It has an excellent open or closed contact condition
with excellent isolation between actuating coil and contact set.

By contrast, conventional rotary bandswitch structures designed around
60 to 70 years ago, are open to all sorts of contamination, including
OXIDATION of contacts plus wear of typically cheap contact construction
of a bygone era. Sealed or semi-sealed rotary switch wafers of the
post-WWII era have much longer life than the old open-to-everything
wafer designs that may look good in their first half decade, then
degrade from oxidation after that, before normal wear effects show up.

Based on over a decade of using the TV channel "turret tuner" (such as
the cheap products of Standard Coil tuners of long ago) types just for
TV channel selection, I wouldn't try to convert those to anything else
than scrap. I'm being kind on that evaluation. The MECHANICS of such
turret tuners may look good, but VHF-UHF circuits don't work on either
mechanics or appearance. HF circuits might squeak by, but the typical
contact set of turret tuners was never optimized for either wear or
contact resistance. It was 'optimized' entirely for maximum profit from
lowest-possible cost of components in a highly-competitive TV market of
long ago.

Today there are a number of inexpensive small relays used in HF radio
equipment, especially in automatic antenna tuners (used for switching
banks of binary-progression-values of inductors and capacitors) from
direct microcontroller control of actuating coils. Those work very well
and show no degredation running with 100 W of RF or more at 50 Ohm
impedances. Millions of automobiles on the road today are tooling

around
with little packages of relays controlling everything from headlights
to
sensor selection in adverse temperature ranges and high vibration, no
real problems from those relays.

In short, small semi-sealed low-power relays are FINE for vacuum tube
circuit switching in homebrew electronics, properly applied. They can
easily replace most rotary bandswitching applications in layout with
less stray circuit series-inductance and parallel-to-ground
capacitance
than with point-to-point wiring.

73, Len AF6AY
LenAnderson@ieee.org

315. Re: Icom R1500 USB driver, intermittent, audio dead

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-21 21:23:26 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <0d0c0526-154a-4950-af2c-314354452014@f9g2000vbf.googlegroups.com>
Source record: 3218

On Mar 20, 8:07 pm, Joerg <notthisjoerg...@removethispacbell.net>
wrote:
> Hello Folks,
>
> Has anyone ever had this happen and maybe knows what could be wrong?
>
> The Icom R1500 behaves like a PCR1500 when controlled via the PC. Or so
> says Icom. When I try to control it through the virtual COM3 port via
> USB it seems to have lots of data traffic jams. If I turn the "virtual"
> dial too fast the R1500 seems to lag. Sometimes it doesn't react at all
> and seconds later starts slowly tuning through all the frequencies I had
> chosen. This can go on for half a minute until it has trundled out.
>
> Audio is supposed to go via the same USB cable but not as a serial COM
> port. Well, that part doesn't work at all, no audio.
>
> --
> 73, Joerg

This sounds like a problem I had when I wrote an ICOM radio control
program in Visual Basic.
What was happening to me was the computer was sending control data for
every click of the wheel. The radio had trouble responding to this
much data. I changed the way the radio was tuned by installing virtual
buttons over and under each digit of thee display. Clicking on one of
these buttons would increase/decrease the frequency by
10,100,1000.....Hz.

Something that may cause a similar problem might be if the baud rate
is not set high enough on the radio. I believe on mine you could
select 2400 or 9600 baud. My software worked much better at 9600 baud.
At a slower baud rate I could click a frequency increase buton 3 times
then look at my radio and see them change the radio there was so much
delay.

Jimmie

316. Re: Icom R1500 USB driver, intermittent, audio dead

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-21 21:28:32 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <d_cxl.24424$yr3.5143@nlpi068.nbdc.sbc.com>
Source record: 3219

JIMMIE wrote:
> On Mar 20, 8:07 pm, Joerg <notthisjoerg...@removethispacbell.net>
> wrote:
>> Hello Folks,
>>
>> Has anyone ever had this happen and maybe knows what could be wrong?
>>
>> The Icom R1500 behaves like a PCR1500 when controlled via the PC. Or so
>> says Icom. When I try to control it through the virtual COM3 port via
>> USB it seems to have lots of data traffic jams. If I turn the "virtual"
>> dial too fast the R1500 seems to lag. Sometimes it doesn't react at all
>> and seconds later starts slowly tuning through all the frequencies I had
>> chosen. This can go on for half a minute until it has trundled out.
>>
>> Audio is supposed to go via the same USB cable but not as a serial COM
>> port. Well, that part doesn't work at all, no audio.
>>
>> --
>> 73, Joerg
>
> This sounds like a problem I had when I wrote an ICOM radio control
> program in Visual Basic.
> What was happening to me was the computer was sending control data for
> every click of the wheel. The radio had trouble responding to this
> much data. I changed the way the radio was tuned by installing virtual
> buttons over and under each digit of thee display. Clicking on one of
> these buttons would increase/decrease the frequency by
> 10,100,1000.....Hz.
>
> Something that may cause a similar problem might be if the baud rate
> is not set high enough on the radio. I believe on mine you could
> select 2400 or 9600 baud. My software worked much better at 9600 baud.
> At a slower baud rate I could click a frequency increase buton 3 times
> then look at my radio and see them change the radio there was so much
> delay.
>

I think the default baud rate of the R1500 is 38400 baud. Should be
plenty. But you could be right, there may be a buffer overflow somewhere
and then it chokes. Sometimes when it has finally trundled out it sits
at the final frequency but the mode didn't switch.

All I really want to do is use the set as a spectrum analyzer, at least
most of the time. And I am really wondering why the USB packet data
doesn't work at all.

--
73, Joerg

317. Re: Was my fatehr's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-21 21:36:12 UTC
From: AF6AY <LenAnderson@ieee.org>
Message-ID: <003f3a46-d0a5-4037-9b62-18e609ed5df2@o2g2000prl.googlegroups.com>
Source record: 3220

On Mar 17, 10:12 pm, Robert casey <wa2...@ix.netcom.com> wrote:
> Looking thru a friend's Feb 2009 QST, saw an article on the W6TC "HBR"
> double conversion homebrew radio. Which my father may have built a copy
> of. I no longer have that radio, but looking at the pictures of teh sets
> in the QST article, it looks very similar to what my father built. I do
> remember that he used a 1.8MHz crystal for what might have been the 1st IF
> to 2nd IF conversion mixer. I also remember, in the mid 60's (I was in
> grammar school) getting this crystal for my father as an Xmas gift (well, I
> gave him money that he used to order the crystal, I would not have been old
> enough to know how to mail order stuff myself yet).
>
> Anyway, did the HBR use a crystal of a frequency like this as a conversion
> local osc mixer? Or maybe the crystal wasn't in an oscillator circuit, but
> maybe as a bandpass filter?

Bob, try www.qsl.net/k5bcq/HBR/hbr.html for a rather complete
collection of
Home Brew Receiver photos, schematics, details, hints&kinks, etc.,
which is Kees Talen's website. It isn't as squashed together as QST
articles (which don't cover all the HBR versions) nor does it have the
extra 450 KB warning page present with QST article downloads.

73, Len AF6AY

318. Re: Icom R1500 USB driver, intermittent, audio dead

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-21 22:15:01 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <3fffbb9c-a88a-4b62-a8f2-e9cdfe01a935@u1g2000vbb.googlegroups.com>
Source record: 3221

On Mar 21, 5:28 pm, Joerg <notthisjoerg...@removethispacbell.net>
wrote:
> JIMMIE wrote:
> > On Mar 20, 8:07 pm, Joerg <notthisjoerg...@removethispacbell.net>
> > wrote:
> >> Hello Folks,
>
> >> Has anyone ever had this happen and maybe knows what could be wrong?
>
> >> The Icom R1500 behaves like a PCR1500 when controlled via the PC. Or so
> >> says Icom. When I try to control it through the virtual COM3 port via
> >> USB it seems to have lots of data traffic jams. If I turn the "virtual"
> >> dial too fast the R1500 seems to lag. Sometimes it doesn't react at all
> >> and seconds later starts slowly tuning through all the frequencies I had
> >> chosen. This can go on for half a minute until it has trundled out.
>
> >> Audio is supposed to go via the same USB cable but not as a serial COM
> >> port. Well, that part doesn't work at all, no audio.
>
> >> --
> >> 73, Joerg
>
> > This sounds like a problem I had when I wrote an ICOM radio control
> > program in Visual Basic.
> > What was happening to me was the computer was sending control data for
> > every click of the wheel. The radio had trouble responding to this
> > much data. I changed the way the radio was tuned by installing virtual
> > buttons over and under each digit of thee display. Clicking on one of
> > these buttons would increase/decrease the frequency by
> > 10,100,1000.....Hz.
>
> > Something that may cause a similar problem might be if the baud rate
> > is not set high enough on the radio. I believe on mine you could
> > select 2400 or 9600 baud. My software worked much better at 9600 baud.
> > At a slower baud rate I could click a frequency increase buton 3 times
> > then look at my radio and see them change the radio there was so much
> > delay.
>
> I think the default baud rate of the R1500 is 38400 baud. Should be
> plenty. But you could be right, there may be a buffer overflow somewhere
> and then it chokes. Sometimes when it has finally trundled out it sits
> at the final frequency but the mode didn't switch.
>
> All I really want to do is use the set as a spectrum analyzer, at least

> most of the time. And I am really wondering why the USB packet data
> doesn't work at all.
>
> --
> 73, Joerg- Hide quoted text -
>
> - Show quoted text -

Yes, Sorry I wasnt thinking about it being USB and it sounded so much like the problem I had. I wrote the program before USB ports were around.
Have you tried another computer, remember you are running Windoze.
I was thinking of getting one of those radios as I listen a lot more than Im on the air. The earilest radio I have is nearly 20 years old huge and clunky. Besides the computer interface not working as expected what do you thin of the radio?

Jimmie

319. Re: Icom R1500 USB driver, intermittent, audio dead

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-21 23:24:46 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <bHexl.14852$W06.14180@flpi148.ffdc.sbc.com>
Source record: 3222

JIMMIE wrote:
> On Mar 21, 5:28 pm, Joerg <notthisjoerg...@removethispacbell.net>
> wrote:
>> JIMMIE wrote:
>>> On Mar 20, 8:07 pm, Joerg <notthisjoerg...@removethispacbell.net>
>>> wrote:
>>>> Hello Folks,
>>>> Has anyone ever had this happen and maybe knows what could be wrong?
>>>> The Icom R1500 behaves like a PCR1500 when controlled via the PC. Or so
>>>> says Icom. When I try to control it through the virtual COM3 port via
>>>> USB it seems to have lots of data traffic jams. If I turn the "virtual"
>>>> dial too fast the R1500 seems to lag. Sometimes it doesn't react at all
>>>> and seconds later starts slowly tuning through all the frequencies I had
>>>> chosen. This can go on for half a minute until it has trundled out.
>>>> Audio is supposed to go via the same USB cable but not as a serial COM
>>>> port. Well, that part doesn't work at all, no audio.
>>>> --
>>>> 73, Joerg
>>> This sounds like a problem I had when I wrote an ICOM radio control
>>> program in Visual Basic.
>>> What was happening to me was the computer was sending control data for
>>> every click of the wheel. The radio had trouble responding to this
>>> much data. I changed the way the radio was tuned by installing virtual
>>> buttons over and under each digit of thee display. Clicking on one of
>>> these buttons would increase/decrease the frequency by
>>> 10,100,1000.....Hz.
>>> Something that may cause a similar problem might be if the baud rate
>>> is not set high enough on the radio. I believe on mine you could
>>> select 2400 or 9600 baud. My software worked much better at 9600 baud.
>>> At a slower baud rate I could click a frequency increase buton 3 times
>>> then look at my radio and see them change the radio there was so much
>>> delay.
>> I think the default baud rate of the R1500 is 38400 baud. Should be
>> plenty. But you could be right, there may be a buffer overflow somewhere
>> and then it chokes. Sometimes when it has finally trundled out it sits
>> at the final frequency but the mode didn't switch.
>>
>> All I really want to do is use the set as a spectrum analyzer, at least
>> most of the time. And I am really wondering why the USB packet data
>> doesn't work at all.
>>
>> --
>> 73, Joerg- Hide quoted text -
>>

>> - Show quoted text -
>
> Yes, Sorry I wasnt thinking about it being USB and it sounded so much
> like the problem I had. I wrote the program before USB ports were
> around.

Well, it is USB but inside is a bridge. One data stream is serial and
(via the driver) the PC sees that as a regular COM port. The other part
is a USB packet stream. Or, in my case, should have been. Both via the
same USB plug.

> Have you tried another computer, remember you are running Windoze.
> I was thinking of getting one of those radios as I listen a lot more
> than Im on the air. The earilest radio I have is nearly 20 years old
> huge and clunky. Besides the computer interface not working as
> expected what do you thin of the radio?
>

It's pretty good. Does have some issues with very strong signals, I have
some TV stations burst into non-TV VHF, for example. Sensitivity above a
GHz or so is pretty poor but there ain't much there anyhow. The hardware
seems ok but the software that Icom supplied is not, IMHO. Also, this
radio could be a really nice spectrum analyzer but Icom doesn't seem to
understand the market potential there. Thinking outside the box may not
be their strength. So WinRadio is going to eat their lunch in that domain.

I bought it at AES. I'd go for the best price, "bonus" software such as
Bonito is IMHO not worth it.

--
73, Joerg

320. Re: Was my father's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-21 23:31:54 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <UNexI.10286$%54.8159@nlpi070.nbdc.sbc.com>
Source record: 3223

AF6AY wrote:
> "Joerg" posted on Fri, Mar 20 2009 6:06 pm
>
>> ken scharf wrote:
>>> JIMMIE wrote:
>>>> On Mar 18, 9:24 pm, Robert casey <wa2...@ix.netcom.com> wrote:
>
>>> I once saw an article in 73 magazine showing a HB receiver that used a
>>> re-worked turret tv tuner as a band switch. The coils were re-wound
>>> onto the original forms, but some have just replaced the forms with some
>>> of the smaller sized toroid cores. I have a bunch of old tv tuners in
>>> the junk box, but over the years the contacts have gone bad and now show
>>> a high resistance. Maybe they could be cleaned up, but it no longer
>>> seems worth the effort. My new idea is to use miniature relays to
>>> switch the circuits. I recently found nearly a gross of small relays
>>> for free so why not?
>> Relays will most likely bring some grief over the years with contacts
>> not conducting 100% and such. Better use band switching diodes or PIN
>> diodes.
>
> I disagree based on some experience in environmentally testing relays
> ranging from high-power to low-power to 'choppers' in so-called
> stabilized
> (DC) amplifiers for military avionics, then doing comparative testing
> against the cheaper commercial relay designs on the market over 50
> years
> ago.
>
> About the only "grief" is one can get is failure to wire it correctly
> or
> not understanding what relay contacts acually do or how to power their
> actuating coils.
>
> Power relays CAN result in contact pitting and poor resistance as a
> result
> of many multiple activations while carrying inductive loads of many
> Amperes of current with resulting very high voltage back-EMF
> ('flyback')
> conditions on contact separation. That is NOT the case with receiver
> bandswitching applications. Not even close.
>
> There are some unusual contact effects in so-called "dry" circuits
> carrying femtoAmpere currents or less but those won't affect high-
> impedance input and output circuits common to vacuum tubes. One of

> the
> better choices for no-nonsense, easier to implement bandswitch
> conversions without much cost is to use modern, easy-to-get small
> relays
> requiring only 100 to 150 mW coil powers, available in coil operating
> voltage increments of 6, 12, 18, 24 VDC...or, if salvaging older tube
> equipment, the "plate relays" of a half century ago designed for
> higher
> 12 to 30 VDC, comparable powers for a few mA of plate current in
> coils.
> [much harder to get now given all electronics is firmly in the solid-
> state era starting over 40 years ago] Some relay makers, such as
> Omron, are widely used in electronics, especially for automotive
> applications and are found listed in all major distributor catalogs.
>
> Relay contacts can easily withstand 200 to 400 VDC stock of now v. old
> (half-century ago). The make or break contacts do NOT involve any
> unusual RF impedance characteristics other than a few pFd of
> capacitance
> equivalent to ordinary point-to-point wiring or the lead-length
> inductance of some short point-to-point wire inductance in the low
> nanoHy range. It has an excellent open or closed contact condition
> with excellent isolation between actuating coil and contact set.
>
> By contrast, conventional rotary bandswitch structures designed around
> 60 to 70 years ago, are open to all sorts of contamination, including
> OXIDATION of contacts plus wear of typically cheap contact
> construction
> of a bygone era. Sealed or semi-sealed rotary switch wafers of the
> post-WWII era have much longer life than the old open-to-everything
> wafer designs that may look good in their first half decade, then
> degrade from oxidation after that, before normal wear effects show up.
>
> Based on over a decade of using the TV channel "turret tuner" (such as
> the cheap products of Standard Coil tuners of long ago) types just for
> TV channel selection, I wouldn't try to convert those to anything else
> than scrap. I'm being kind on that evaluation. The MECHANICS of such
> turret tuners may look good, but VHF-UHF circuits don't work on either
> mechanics or appearance. HF circuits might squeak by, but the typical
> contact set of turret tuners was never optimized for either wear or
> contact resistance. It was 'optimized' entirely for maximum profit
> from
> lowest-possible cost of components in a highly-competitive TV market
> of
> long ago.
>
> Today there are a number of inexpensive small relays used in HF radio
> equipment, especially in automatic antenna tuners (used for switching
> banks of binary-progression-values of inductors and capacitors) from
> direct microcontroller control of actuating coils. Those work very

> well
> and show no degredation running with 100 W of RF or more at 50 Ohm
> impedances. Millions of automobiles on the road today are tooling
> around
> with little packages of relays controlling everything from headlights
> to
> sensor selection in adverse temperature ranges and high vibration, no
> real problems from those relays.
>
> In short, small semi-sealed low-power relays are FINE for vacuum tube
> circuit switching in homebrew electronics, properly applied. They can
> easily replace most rotary bandswitching applications in layout with
> less stray circuit series-inductance and parallel-to-ground
> capacitance
> than with point-to-point wiring.
>

Relays are ok in those applications, where there are actual currents
flowing. What I meant was pure signal switching with no DC currents.
Sealed relays, Reeds, mercury-wetted and such work quite well there. But
non-sealed versions have issues and a snap-on plastic cap ain't a seal.
Those problems became really nasty after we moved across an ocean and
all this stuff was in a sea container for two months. After that almost
all the band switching relays had problems, had to clean all of them.
Now I am down to one sticky relay every couple month or so. Some I have
replaced with PIN diode circuits and that, of course, made the issues
completely go away. But it's always a hassle to do in an exisitng circuit.

--
73, Joerg

321. Re: Was my father's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-22 15:52:58 UTC
From: Unca Pete <radioconnection@cox.net>
Message-ID: <Tytxl.105097$rb1.52516@newsfe02.iad>
Source record: 3224

"Joerg" <notthisjoergsch@removethispacbell.net> wrote in message >
> Yeah, I wish the designers of the NRD-515 here had known that as well.
> Every few months a relay will become "sticky". The S-meter drops to zilch,
> rock the attenuator switch 5-10 times, and it's back :-(
>
> Relays with some current are ok but I prefer the electronic method. PIN
> diodes with lots of current and plenty of carrier lifetime usually work.
> One just has to make sure there aren't any rectification effects that can
> cause IM or harmonics in the presence of strong signals. FET switches are
> sometimes a good deal as well but since the SD5000 and SD5400 have gone
> towards high-priced boutique status not so much anymore.
>
> --
> 73, Joerg

Hello Joerg

Odd you're having that problem with the NRD-515. So far mine
has been rock solid, except for the rotting foam disease in the
mechanical filters... But... I do have constant problems with
the relay that selects the external VFO in the NSD-515
transmitter! It always needs attention and cleaning. Its the
odd-ball relay that was added on the bottom of the mother
board. I'm wondering if you have had the same problem
with the transmitter (assuming you own the pair) and what
you did to fix it.

73

Peter k1zjh

322. Re: Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-22 15:59:07 UTC
From: Unca Pete <radioconnection@cox.net>
Message-ID: <Tytxl.105098$rb1.66833@newsfe02.iad>
Source record: 3225

"Highland Ham" <rfburns@allbands.net> wrote in message
news:Vf2dnWcdK-q1nVjUnZ2dnUVZ8tOWnZ2d@pipex.net...
> > ==========
> Agree with that ,although ARRL members should have a choice.
> If they prefer QEX over QST they should have that option.
> ARRL news is sent weekly by e-mail upon request .Moreover, members can
> access QST articles via the ARRL web site, and also can access QEX
> articles.
>
> Living in the UK I have opted for the annual CD-ROM ,which is published in
> March ,including QST , QEX and the Contest Mag. covering the past calendar
> year ,which suits me fine.
> However I believe this option is not available to US residents .
> Perhaps something to go for.
>
> Frank GM0CSZ / KN6WH

The ARRL derrives a lot of income from the QST
advertisements. Decreased circulation numbers would cost
them revenue. I'm sure the answer would be increasing
the circulation figures for QEX, and making up the revenue
there, but the logistics might be too great. That's why the
QSTs are delivered on a timely basis stateside; stale 12
month old adds delivered by CD won't make the advertisers
happy. I've complained about this in the past (dumbing down
of QST) and was told that they are serving the majority
of the membership with the current content.

Anyway, I feel I might have hijacked Jimmies' thread, and
I'll stop posting with this last comment.

Pete

323. Re: Was my father's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-22 16:39:57 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <HRtxl.26860$ZP4.10105@nlpi067.nbdc.sbc.com>
Source record: 3226

Unca Pete wrote:
> "Joerg" <notthisjoergsch@removethispacbell.net> wrote in message >
>> Yeah, I wish the designers of the NRD-515 here had known that as well.
>> Every few months a relay will become "sticky". The S-meter drops to zilch,
>> rock the attenuator switch 5-10 times, and it's back :-(
>>
>> Relays with some current are ok but I prefer the electronic method. PIN
>> diodes with lots of current and plenty of carrier lifetime usually work.
>> One just has to make sure there aren't any rectification effects that can
>> cause IM or harmonics in the presence of strong signals. FET switches are
>> sometimes a good deal as well but since the SD5000 and SD5400 have gone
>> towards high-priced boutique status not so much anymore.
>>
>> --
>> 73, Joerg
>
> Hello Joerg
>
> Odd you're having that problem with the NRD-515. So far mine
> has been rock solid, except for the rotting foam disease in the
> mechanical filters... But... I do have constant problems with
> the relay that selects the external VFO in the NSD-515
> transmitter! It always needs attention and cleaning. Its the
> odd-ball relay that was added on the bottom of the mother
> board. I'm wondering if you have had the same problem
> with the transmitter (assuming you own the pair) and what
> you did to fix it.
>

Actually I only have the receiver. Besides relays there is one other serious problem: The bearings of the tune encoder are seriously worn, the shaft sloshes around. I am not looking forward to the day when I have to disect that thing.

Rotting foam in filters? Whoops, I've got to watch out for that. As for relays, my problem really got worse after all this was in a sea container for a while and crossed an ocean.

--
73, Joerg

324. Re: Grant Funding Search Scam

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-22 18:06:02 UTC
From: joeturn <joeturn2000@yahoo.com>
Message-ID: <448b54df-a664-4d5a-9c08-6da010daafe1@a12g2000yqm.googlegroups.com>
Source record: 3227

One bad apple is all it took!! Think the TV stations that promoted
the
scam to begin with can save face now?? Those informercials ought not
to be televised without a PayPal approval huh?

http://ripoffreport.com/reports/0/432/ripoff0432085.htm

325. Re: Was my father's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-22 18:29:21 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <2cbf8d02-8d16-4e1a-809e-641710a64fee@l22g2000vba.googlegroups.com>
Source record: 3228

On Mar 21, 5:11 pm, Joerg <notthisjoerg...@removethispacbell.net>
wrote:
> JIMMIE wrote:
> > On Mar 20, 6:47 pm, ken scharf <wa2mzeNOSPAMB...@bellsouth.net> wrote:
> >> JIMMIE wrote:
> >>> On Mar 18, 9:24 pm, Robert casey <wa2...@ix.netcom.com> wrote:
> >>>> The design used plug-in coils for the osc and rf stages, and
> >>> they were double conversion designs, with a first IF of
> >>> 1600 kc and a second IF of either 100 kc or 85 kc (when
> >>> using surplus ARC-5 IFTs.) The 1800 mc xtal you bought
> >>> your dad was used for the second coversion osc. to convert
> >>> the 1600 kc IF down to 100 kc. Many hams deviated from
> >>> the exact original IF frequencies (i.e. strong local BC
> >>> station on 1600 kc) which might explain why the xtal
> >>>> was chosen for 1800 kc instead of 1500 or 1700.
> >>> We have a local mid power station at 1600KHz, WWRL, at my parents' house,
> >>> so my father might have wanted to avoid problems with it.
> >>> His radio had a bandswitch instead of plug in coils, and he'd receive
> >>> various broadcast SW stations. He wasn't a ham at the time just yet.
> >>> I had a friend who was a retired engineer with GE turned TV tech who
> >>> built
> >>> one with a band switch and he later modified it to
> >>> be more of a general purpose SW receiver. His name was Olin Griggs.
> >>> Jimmie.
> >> I once saw an article in 73 magazine showing a HB receiver that used a
> >> re-worked turret tv tuner as a band switch. The coils were re-wound
> >> onto the original forms, but some have just replaced the forms with some
> >> of the smaller sized toroid cores. I have a bunch of old tv tuners in
> >> the junk box, but over the years the contacts have gone bad and now show
> >> a high resistance.   Maybe they could be cleaned up, but it no longer
> >> seems worth the effort. My new idea is to use miniature relays to
> >> switch the circuits. I recently found nearly a gross of small relays
> >> for free so why not?- Hide quoted text -
>
> >> - Show quoted text -
>
> > I tried the TV tuner trick one time and it didnt work well at all.
> > Most tuners are tossed because the contacts fail. ...
>
> Not really. Back then TVs were often tossed because the flyback xfmr had
> blown and repair was deemed uneconomical. Or someone said that because
> in reality they wanted that brand spanking new set that was one sale.
>
> But this is so long ago that if there's any left the contacts will have

> corrodes away.
>
> [...]
>
> --
> 73, Joerg- Hide quoted text -
>
> - Show quoted text -

You must be younger than me, Ive replaced a lot of TV tuners and flybacks. It was in the early 80s that i first noticed
TVs becoming diposable and quit working on them. Luckily for me there was still a lot of other electtronic repair work needed to be done. Most of the local industry was becoming more electronic oriented in their equipment and needed someone to maintain their equipment but did not want to hire a full time tech. The sawmills, textile plants, food processing plants kept me pretty busy aand i enjoyed the work much more not having to deal with the usual customers.

Jimme

326. 6M amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-22 19:53:01 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <6b29f753-ad87-4e98-acef-41fcd772c971@u1g2000vbb.googlegroups.com>
Source record: 3229

Ive been building a 6M amp using a 4CX250B. I was looking through the schematic of other amps to get an idea of what is needed for a plate choke. In the Sep 1984 QST page 12 I found a plate choke described as 1-5/8 inches of # 22 enameled wire close wound on a 3/8 inch Teflon rod. COULD THIS BE CORRECT??. That sounds like about two turns of wire to me.

I believe what they meant to say was 'close wind the wire until the coil is 1-5/8 inches long'.

I also do not have the Teflon(tm) rod that was also part of the discription. Would ceramic work as well?

BTW I have no plans of building a cathode driven amp as dhown in the article. I was just stealing plans for the choke.

Jimmie

327. Re: 6M amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-22 20:25:53 UTC
From: Unca Pete <radioconnection@cox.net>
Message-ID: <I9xxl.90981$Rg3.38225@newsfe17.iad>
Source record: 3230

I'd think an old Ohmmite Z-50 would be ideal. Wonder what the value in uH was?

Pete

328. Re: Was my father's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-22 20:45:59 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <tmxxl.15147$D32.4047@flpi146.ffdc.sbc.com>
Source record: 3231

JIMMIE wrote:
> On Mar 21, 5:11 pm, Joerg <notthisjoerg...@removethispacbell.net>
> wrote:
>> JIMMIE wrote:
>>> On Mar 20, 6:47 pm, ken scharf <wa2mzeNOSPAMB...@bellsouth.net> wrote:
>>>> JIMMIE wrote:
>>>>> On Mar 18, 9:24 pm, Robert casey <wa2...@ix.netcom.com> wrote:
>>>>>> The design used plug-in coils for the osc and rf stages, and
>>>>> they were double conversion designs, with a first IF of
>>>>> 1600 kc and a second IF of either 100 kc or 85 kc (when
>>>>> using surplus ARC-5 IFTs.) The 1800 mc xtal you bought
>>>>> your dad was used for the second coversion osc. to convert
>>>>> the 1600 kc IF down to 100 kc. Many hams deviated from
>>>>> the exact original IF frequencies (i.e. strong local BC
>>>>> station on 1600 kc) which might explain why the xtal
>>>>>> was chosen for 1800 kc instead of 1500 or 1700.
>>>>> We have a local mid power station at 1600KHz, WWRL, at my parents' house,
>>>>> so my father might have wanted to avoid problems with it.
>>>>> His radio had a bandswitch instead of plug in coils, and he'd receive
>>>>> various broadcast SW stations. He wasn't a ham at the time just yet.
>>>> I had a friend who was a retired engineer with GE turned TV tech who
>>>> built
>>>> one with a band switch and he later modified it to
>>>> be more of a general purpose SW receiver. His name was Olin Griggs.
>>>> Jimmie.
>>> I once saw an article in 73 magazine showing a HB receiver that used a
>>> re-worked turret tv tuner as a band switch. The coils were re-wound
>>> onto the original forms, but some have just replaced the forms with some
>>> of the smaller sized toroid cores. I have a bunch of old tv tuners in
>>> the junk box, but over the years the contacts have gone bad and now show
>>> a high resistance. Maybe they could be cleaned up, but it no longer
>>> seems worth the effort. My new idea is to use miniature relays to
>>> switch the circuits. I recently found nearly a gross of small relays
>>> for free so why not?- Hide quoted text -
>>> - Show quoted text -
>> I tried the TV tuner trick one time and it didnt work well at all.
>> Most tuners are tossed because the contacts fail. ...
>> Not really. Back then TVs were often tossed because the flyback xfmr had
>> blown and repair was deemed uneconomical. Or someone said that because
>> in reality they wanted that brand spanking new set that was one sale.
>>
>> But this is so long ago that if there's any left the contacts will have
>> corrodes away.
>>

>> [...]
>>
>> --
>> 73, Joerg- Hide quoted text -
>>
>> - Show quoted text -
>
> You must be younger than me, Ive replaced a lot of TV tuners and
> flybacks. It was in the early 80s that i first noticed
> TVs becoming diposable and quit working on them. Luckily for me there
> was still a lot of other electtronic repair work needed to be done.
> Most of the local industry was becoming more electronic oriented in
> their equipment and needed someone to maintain their equipment but did
> not want to hire a full time tech. The sawmills, textile plants, food
> processing plants kept me pretty busy aand i enjoyed the work much
> more not having to deal with the usual customers.
>

Same here, in the early 80's I began to refuse fixing TVs and stuff. But
even before that, I remember the flyback transformers for some sets
being so outrageously expensive that a repair plain didn't make sense.
Especially if it had taken out the H-deflection tube and some other
stuff with it or the set itself had already been quite tired at the time
it hissed its good-bye. This was in Europe.

--
73, Joerg

329. Re: Was my father's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-22 22:14:12 UTC
From: AF6AY <LenAnderson@ieee.org>
Message-ID: <539de539-e159-4900-bd9b-a24ab8cd8946@y6g2000prf.googlegroups.com>
Source record: 3232

On Mar 21, 4:31 pm, Joerg <notthisjoerg...@removethispacbell.net>
wrote:
> AF6AY wrote:
> > "Joerg" posted on Fri, Mar 20 2009 6:06 pm
> >> ken scharf wrote:
> >>> JIMMIE wrote:
>
> Relays are ok in those applications, where there are actual currents
> flowing. What I meant was pure signal switching with no DC currents.

That's called "dry" switching in the electronics industry, has been
called that for over a half century.

> Sealed relays, Reeds, mercury-wetted and such work quite well there. But
> non-sealed versions have issues and a snap-on plastic cap ain't a seal.

Didn't say that that it was a seal. But...there are many kinds of
'seals' and there are many kinds of contact alloys which few hobbyists
investigate.

> Those problems became really nasty after we moved across an ocean and
> all this stuff was in a sea container for two months. After that almost
> all the band switching relays had problems, had to clean all of them.
> Now I am down to one sticky relay every couple month or so.

My wife and I own a nice 2005 model Chevrolet Malibu MAXX that we've
driven in both driving rain with some intermittent ice to Wisconsin
from California and back, to Washington state from California and
back. It has two little boxes of many small-signal relays, only a
very few qualifying for large-signal types. Never a problem since we
got it in late June of 2005. Those relay boxes all have lids and the
small relays have little covers and that auto has definitely been
exposed to the environment many times in the last 4 years.

I can sympathize with your bad sea container shipping experience but
consumer-grade radios (such as for amateur radio) were never designed
to be exposed to sea evnvironments. Ask yourself how all those off-
shore made radios made it to the USA? Inside standardized container
boxes.

I didn't make my comment lightly or pretend that I know everything
there is to electronics. I do know, by a rather large set of
experiences that 'dry' circuit relays (hermetically sealed OR by
reasonably-good individual covers) will work without having to be
'operated many times' in order to 'clean their contacts.'

I'll cite one application that is military, the US AN/PRC-104 manpack HF transceiver. About one-third of that backpack radio is an automatic antenna tuner so that one whip length can be optimized for best electrical characteristics. It does that with a rather conventional microprocessor control driving two banks of binary-sequence inductance and capacitance values switched by relays. It has been in operational status with the US Army since around 1984 and is expected to be phased out soon in favor of more modern HF-to-UHF transceiver designs. It's been a while since I've seen the guts of it but I don't recall that it had any hermetically-sealed relays in it.

Right now I'm beginning to start cutting holes for a rebuild of an 'ancient' HF receiver once made for my late father wanting to tune to some SW BC stations, principally Radio Sweden back in 1964. I've been fortunate to get a large collection of North Electric small sealed relays dating back to about 1955 production which I've already breadboarded for bandswitching use. Very familiar with relay testing, I found NO problems from 'dry' contact switching. The low capacitance to ground and minimal series inductance from the contact set do NOT upset any of the L-C circuits being switched.

> replaced with PIN diode circuits and that, of course, made the issues
> completely go away. But it's always a hassle to do in an exisitng circuit.

Yes, I have that in the filter board of my two decade old Icom IC-R70, all switched with 'RF switch' diodes (no registry number). If needs be, that entire filter board could be enclosed to prevent any problems from the environment. Icom used that sort of semi-conductor switching for ease of overall parts cost along with reduced labor costs to Icom. Such work fine at the LOW impedances involved (50 to 75 Ohms) but I've tried to duplicate that at 10 KOhms on a breadboard and have run into problems with diodes' own impedances affecting circuit operation. Those could be solved, I'm sure, but I didn't care to spend weeks fiddling with them for my rebuild project. The relay contact set had only the shunt capacity and series inductance to contend with and those were very low values and easily compensated for alignment.

73, Len AF6AY
LenAnderson@ieee.org

330. Re: 6M amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-22 23:14:26 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <8a2a3649-0270-4d65-ad4b-0eb03710f8d2@e3g2000vbe.googlegroups.com>
Source record: 3233

On Mar 22, 4:25 pm, "Unca Pete" <radioconnect...@cox.net> wrote:
> I'd think an old Ohmmite Z-50 would be ideal. Wonder
> what the value in uH was?
>
> Pete

I thought about a Z-50. I have one I use on a 6 Meter amp using a pair
of 6146Bs. I didnt know if it would work with the 4cx250s or not.

6.8 uh rings a bell but Im not sure.

Id rather wind my own if it will keep me from having to pull out the
credit card and pay more shipping than what the thing cost.

Jimme

331. Re: Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-22 23:42:07 UTC
From: AF6AY <LenAnderson@ieee.org>
Message-ID: <925d16ee-c235-44ed-ac1c-4679c400f740@p42g2000prp.googlegroups.com>
Source record: 3234

Lawrence Statton posted on Sat, Mar 21 2009 6:46 am

>"Unca Pete" <radioconnection@cox.net> writes:
>>
>> I'll join the ARRL the day I can choose QEX over the QST
>> forced subscription that comes with the membership.
>>
>> Pete k1zjh
>
>Have you ever thought of JOINING ARRL, and using your position as
>a member to petition for this change?
>
>Change is made by those who participate.
>
>--N1GAK

CHANGE is made by those who cozy up to the Old Boys Network of the League. The arch-conservatives there want only ONE thing: Preservation of their rank/status/title and the ability to Rule. The rest is just PR BS to convince members that They are 'for' members. As a voting member of the ARRL (until end of March) for two years, I've gotten a chance to 'vote' just once and then only for lower positions; candidacy for Director was unopposed so the incumbent was 'automatically' elevated to another term. Some 'voting,' not.

As one who has been around the electronics industry for over a half century, I KNOW all the styles of writing that are acceptable in written correspondence. After three such carefully-structured correspondences FAILED to get an answer (one Form Letter reply is not counted as any sort of real reply), there wasn't any point of wasting my time with them.

The Editor of QST seems technically inept but appears to have the 'company man.' The Editor of QEX is technically better but could spend more time going over manuscripts to 'tighten up' some text and yield more technical explanations in the same amount of pages. QST's flavor of presentation is getting more and more like 'Ham Radio for Dummies.' Ohm's Law of Resistance is apparently 'rocket science' according to QST pages...if there is any in between the blitz of self-important PR BS there. Bear in mind I've been (first) a contributor to, then Associate Editor (for two years) at Ham Radio magazine back before 1990 and when I did not have any amateur radio license (just a First 'Phone granted in 1956).

Yes, if one wants (marginal quality) PDF downloads from QST since the year dot, membership might be worth something. Most of those PDFs come

with an inserted first page of copyright warnings which is about 450 KB size all by itself, always the same page. Makes a lot of difference in downloading over a dial-up connection. It is better to just plain BUY a CD of selected years rather than download the same thing over and over again. That has the advantage of greater monetary revenue for the League...something They NEED to keep the paid high-level staff in 6-figure annual incomes.

With paid membership (and its 'voting rights') comes a 3:1 ratio of surface mail spam to BUY BUY BUY this and that as compared to actual worthwhile news/information. Good copy, cleverly misinforms the 'lowered cost of shipping' (on 'specials') as 'member money savings.' Never mind that I can go to HRO or AES outlets and get the SAME product over the couner at the SAME price with NO shipping charges. Shipping direct from Newington Hq means they are pocketing the difference local stores make as profit for reselling, another small revenue booster for the League. Not much, to be sure, but it denies any real savings to paid members.

The usual rejoinder from League sycophants is "members get QST free!" as if that were an excuse. Hello? The paid advertising space in ANY hobby magazine pays the staff and most overhead (except fulfillment services, aka mail subscription delivery) to keep everyone working. CQ works that way, 73 and Ham Radio magazines worked that way as Independent periodical publishers for years until the advertisers had to tighten their economic belts. By virtue of being a virtual monopoly on amateur radio publications, the ARRL can offer the widest exposure to advertisers so, when economic chips started to deplete beginning around 1990, advertisers gravitated to QST with its demographic guarantee of about 120K 'sales' per issue back then.

Just WHAT has the ARRL gotten for YOU in the past decades? Their influence with the FCC is dropping, witness all the Report and Orders footnotes and denials on dockets 98-143, 05-235, and at least three of the 18 Petitions for change in between those two landmark regulation changes. The ARRL hasn't achieved any new bands on HF except for 5 channels at '60m.' They never got a whole band to play hams-are-vital-and-important to the nation in times of crises. Five CHANNELS. As if the 'technical experts' there had never seen the giant frequency allocation chart in Part 2, Title 47 C.F.R. that shows where everyone is allowed from 9 KHz to 300 GHz...nor did they seem to have a handle on government radio use in HF. The 'WARC' bands came about in 1979 (at WARC-79) by the ITU, not the ARRL. ARRL has yet to join the rest of the IARU in going for any LF bands for amateurs as they do in Europe.

For an excellent peek into thinking of the higher-ups in the League, just read their Minutes of Regional meetings. Most of it is just self-congratulary high-fives among the insiders praising each other. WE don't get to see any talks of 'change' (horrors!) in much of anything. You might say the Spirit of AIG had invaded the ARRL long

ago. In between asking for More Money for the 'Spectrum Defense Fund'
and the 'Foundation' and 'Buying a Brick for the Diamond Terrace,'
Will the League soon be asking for 'bail-out money' from ongress? :-(

Len Anderson, AF6AY
Life Member, IEEE (a Professional Association)

332. Re: 6M amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-23 03:20:14 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <lL6dnRPVxvgobFvUnZ2dnUVZ_jyWnZ2d@earthlink.com>
Source record: 3235

"JIMMIE" <JIMMIEDEE123@YAHOO.COM> wrote in message
news:8a2a3649-0270-4d65-ad4b-0eb03710f8d2@e3g2000vbe.googlegroups.com...
On Mar 22, 4:25 pm, "Unca Pete" <radioconnect...@cox.net> wrote:
> I'd think an old Ohmmite Z-50 would be ideal. Wonder
> what the value in uH was?
>
> Pete

I thought about a Z-50. I have one I use on a 6 Meter amp using a pair
of 6146Bs. I didnt know if it would work with the 4cx250s or not.

6.8 uh rings a bell but Im not sure.

Id rather wind my own if it will keep me from having to pull out the
credit card and pay more shipping than what the thing cost.

Jimme
&&&&&&&&&&&&&&&&&&&&

One book calls for an 8.2 uH choke.
One design is for using # 28 wire spaced 1 wire diameter on a 1/2 inch form
and 1 3/4 inches long.
Another calls for 30 turs of # 20 wire spaced 1 wire diameter on a 3/4 inch
diameter form that is 3 3/4 inches long. I think the wire stops about 1/2
inch from each end on that form.
If the z50 would handle the current it should be ideal.

333. Re: 6M amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-23 03:56:50 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <d465defb-7644-4f97-8768-11139036bb58@v37g2000vbb.googlegroups.com>
Source record: 3236

On Mar 22, 11:20 pm, "Ralph Mowery" <rmowery28...@earthlink.net>
wrote:
> "JIMMIE" <JIMMIEDEE...@YAHOO.COM> wrote in message
>
> news:8a2a3649-0270-4d65-ad4b-0eb03710f8d2@e3g2000vbe.googlegroups.com...
> On Mar 22, 4:25 pm, "Unca Pete" <radioconnect...@cox.net> wrote:
>
> > I'd think an old Ohmmite Z-50 would be ideal. Wonder
> > what the value in uH was?
>
> > Pete
>
> I thought about a Z-50. I have one I use on a 6 Meter amp using a pair
> of 6146Bs. I didnt know if it would work with the 4cx250s or not.
>
> 6.8 uh rings a bell but Im not sure.
>
> Id rather wind my own if it will keep me from having to pull out the
> credit card and pay more shipping than what the thing cost.
>
> Jimme
> &&&&&&&&&&&&&&&&&&&&&
>
> One book calls for an 8.2 uH choke.
> One design is for using # 28 wire spaced 1 wire diameter on a 1/2 inch form
> and 1 3/4 inches long.
> Another calls for 30 turs of # 20 wire spaced 1 wire diameter on a 3/4 inch
> diameter form that is 3 3/4 inches long. I think the wire stops about 1/2
> inch from each end on that form.
> If the z50 would handle the current it should be ideal.

Thanks for the info 32 turns is what I calculated. I was guessing on
the wire size/ spacing.

Jimmie

334. Re: 6M amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-23 06:16:22 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <85f361bd-ea3b-42d2-8020-fbac4afb2df4@o11g2000yql.googlegroups.com>
Source record: 3237

On Mar 22, 11:20 pm, "Ralph Mowery" <rmowery28...@earthlink.net>
wrote:
> "JIMMIE" <JIMMIEDEE...@YAHOO.COM> wrote in message
>
> news:8a2a3649-0270-4d65-ad4b-0eb03710f8d2@e3g2000vbe.googlegroups.com...
> On Mar 22, 4:25 pm, "Unca Pete" <radioconnect...@cox.net> wrote:
>
> > I'd think an old Ohmmite Z-50 would be ideal. Wonder
> > what the value in uH was?
>
> > Pete
>
> I thought about a Z-50. I have one I use on a 6 Meter amp using a pair
> of 6146Bs. I didnt know if it would work with the 4cx250s or not.
>
> 6.8 uh rings a bell but Im not sure.
>
> Id rather wind my own if it will keep me from having to pull out the
> credit card and pay more shipping than what the thing cost.
>
> Jimme
> &&&&&&&&&&&&&&&&&&&&&
>
> One book calls for an 8.2 uH choke.
> One design is for using # 28 wire spaced 1 wire diameter on a 1/2 inch form
> and 1 3/4 inches long.
> Another calls for 30 turs of # 20 wire spaced 1 wire diameter on a 3/4 inch
> diameter form that is 3 3/4 inches long. I think the wire stops about 1/2
> inch from each end on that form.
> If the z50 would handle the current it should be ideal.

I found a circuit that uses a 50 ohm % watt wirewound resistor for a
plate RFC on a 4cx250.
I may have to try that.

Jimmie

335. Re: Was my father's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-23 22:32:56 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <t6Uxl.12819$hc1.9131@flpi150.ffdc.sbc.com>
Source record: 3238

AF6AY wrote:
> On Mar 21, 4:31 pm, Joerg <notthisjoerg...@removethispacbell.net>
> wrote:
>> AF6AY wrote:
>>> "Joerg" posted on Fri, Mar 20 2009 6:06 pm
>>>> ken scharf wrote:
>>>>> JIMMIE wrote:
>> Relays are ok in those applications, where there are actual currents
>> flowing. What I meant was pure signal switching with no DC currents.
>
> That's called "dry" switching in the electronics industry, has been
> called that for over a half century.
>
>> Sealed relays, Reeds, mercury-wetted and such work quite well there. But
>> non-sealed versions have issues and a snap-on plastic cap ain't a seal.
>
> Didn't say that that it was a seal. But...there are many kinds of
> 'seals' and there are many kinds of contact alloys which few hobbyists
> investigate.
>

Most must make do with whatever places such as Digikey offer at
affordable cost.

>> Those problems became really nasty after we moved across an ocean and
>> all this stuff was in a sea container for two months. After that almost
>> all the band switching relays had problems, had to clean all of them.
>> Now I am down to one sticky relay every couple month or so.
>
> My wife and I own a nice 2005 model Chevrolet Malibu MAXX that we've
> driven in both driving rain with some intermittent ice to Wisconsin
> from California and back, to Washington state from California and
> back. It has two little boxes of many small-signal relays, only a
> very few qualifying for large-signal types. Never a problem since we
> got it in late June of 2005. Those relay boxes all have lids and the
> small relays have little covers and that auto has definitely been
> exposed to the environment many times in the last 4 years.
>

Sure, but in a car relays always switch something that draws a serious
current, more than a few milliamps. That works for a long time. Well,
until a "weld wart" shows up, like it did on a relay in out Genie garage
door opener.

> I can sympathize with your bad sea container shipping experience but
> consumer-grade radios (such as for amateur radio) were never designed
> to be exposed to sea evnvironments. Ask yourself how all those off-
> shore made radios made it to the USA? Inside standardized container
> boxes.
>

Usually they are carefully packaged and silica gel is included. When you
move that usually ain't the case. Plus the radio was quite old by that time.

> I didn't make my comment lightly or pretend that I know everything
> there is to electronics. I do know, by a rather large set of
> experiences that 'dry' circuit relays (hermetically sealed OR by
> reasonably-good individual covers) will work without having to be
> 'operated many times' in order to 'clean their contacts.'
>

Hmm, I've had that happen even in $xxxxx lab gear, not quite
consumer-grade. Never really with mil gear though but those guys can
often design to "the sky's the limit" cost goals.

> I'll cite one application that is military, the US AN/PRC-104 manpack
> HF transceiver. About one-third of that backpack radio is an
> automatic antenna tuner so that one whip length can be optimized for
> best electrical characteristics. It does that with a rather
> conventional microprocessor control driving two banks of binary-
> sequence inductance and capacitance values switched by relays. It has
> been in operational status with the US Army since around 1984 and is
> expected to be phased out soon in favor of more modern HF-to-UHF
> transceiver designs. It's been a while since I've seen the guts of it
> but I don't recall that it had any hermetically-sealed relays in it.
>

But I bet no expense was spared to pick the very best parts for that radio.

> Right now I'm beginning to start cutting holes for a rebuild of an
> 'ancient' HF receiver once made for my late father wanting to tune to
> some SW BC stations, principally Radio Sweden back in 1964. I've been
> fortunate to get a large collection of North Electric small sealed
> relays dating back to about 1955 production which I've already
> breadboarded for bandswitching use. Very familiar with relay testing,
> I found NO problems from 'dry' contact switching. The low capacitance
> to ground and minimal series inductance from the contact set do NOT
> upset any of the L-C circuits being switched.
>

Sealed relays are ok. I also have a few really old ones here and so far
they have never let me down. But I don't have enough to equip a filter
bank with 15-20 in- and outputs. For that I've got a stash of HSMP-3810
PIN diodes.

>> replaced with PIN diode circuits and that, of course, made the issues
>> completely go away. But it's always a hassle to do in an exisitng circuit.
>

> Yes, I have that in the filter board of my two decade old Icom IC-R70,
> all switched with 'RF switch' diodes (no registry number). If needs
> be, that entire filter board could be enclosed to prevent any problems
> from the environment. Icom used that sort of semi-conductor switching
> for ease of overall parts cost along with reduced labor costs to
> Icom. Such work fine at the LOW impedances involved (50 to 75 Ohms)
> but I've tried to duplicate that at 10 KOhms on a breadboard and have
> run into problems with diodes' own impedances affecting circuit
> operation. Those could be solved, I'm sure, but I didn't care to
> spend weeks fiddling with them for my rebuild project. The relay
> contact set had only the shunt capacity and series inductance to
> contend with and those were very low values and easily compensated for
> alignment.
>

Yeah, anything above 1K or so is less suitable for diodes. That's where JFETs come in which, in turn, are not so hot for anything low impedance. Unless you use the fat expensive kind and they've got too high capacitances. Many fine FETs like the P8000 have gone over the rainbow bridge by now. I guess they only found homes in ham gear and that wasn't a large enough market.

--
73, Joerg

336. Re: Was my father's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-24 16:37:36 UTC
From: AF6AY <LenAnderson@ieee.org>
Message-ID: <bb971169-7b97-4507-9473-3db88ffa3633@b7g2000pre.googlegroups.com>
Source record: 3239

On Mar 23, 3:32 pm, Joerg <notthisjoerg...@removethispacbell.net>
wrote:
> AF6AY wrote:
> > On Mar 21, 4:31 pm, Joerg <notthisjoerg...@removethispacbell.net>
> > wrote:
> >> AF6AY wrote:
> >>> "Joerg" posted on Fri, Mar 20 2009 6:06 pm
> >>>> ken scharf wrote:
> >>>>> JIMMIE wrote:
> >> Relays are ok in those applications, where there are actual currents
> >> flowing. What I meant was pure signal switching with no DC currents.
>
> > That's called "dry" switching in the electronics industry, has been
> > called that for over a half century.
>
> >> Sealed relays, Reeds, mercury-wetted and such work quite well there. But
> >> non-sealed versions have issues and a snap-on plastic cap ain't a seal.
>
> > Didn't say that that it was a seal. But...there are many kinds of
> > 'seals' and there are many kinds of contact alloys which few hobbyists
> > investigate.
>
> Most must make do with whatever places such as Digikey offer at
> affordable cost.

I disagree considering that Digikey is one of the largest
distributors
in the world of electronics and offers so many different models AND
price ranges. Then there is Mouser, and Newark, and Allied, and
Jameco, and Ocean State, and Futurlec, and....a whole bunch of
them. None of those are 'giving away' anything.

> Sure, but in a car relays always switch something that draws a serious
> current, more than a few milliamps. That works for a long time. Well,
> until a "weld wart" shows up, like it did on a relay in out Genie garage
> door opener.

I will disagree again, but not on our particular Chevrolet...I only
got a
glance at the electronics wiring manual at a local dealership service
shop and NOT all the controlled circuits were "serious current" ones.
But, if you are convinced that they ALL are, I can't convince you...

> Hmm, I've had that happen even in $xxxxx lab gear, not quite
> consumer-grade. Never really with mil gear though but those guys can

> often design to "the sky's the limit" cost goals.

Sorry, but that is URBAN MYTH among amateurs. What amateurs
don't realize is that components are elevated in cost by EXTREME
ENVIRONMENTS required. Sure, everything at room temperature
works dandy and one can use any kind of schlock parts and get away
with it. Freeze it below brass-monkey temps or heat it more than
boiling water, drop-kick it across the room, run it under extreme
vibration, it MUST WORK. Put most ham gear through that and you
won't have enough left to sell anything but its manuals on e-bay.
Been
there, done that for years...its what I did for a living.

----------------<on the AN/PRC-104 HF transceiver>
> But I bet no expense was spared to pick the very best parts for that radio.

I'll bet you've never seen the inside of it, let alone talk with any
of the
staff at Hughes Ground Systems that designed it. If you want to
investigate it, the TMs (user to depot level) are available on the
'Web.
Hard to find and you may need special clearance to access some
military sites nowadays, but it is available for nothing. If you want
to
pay money for such a manual, fine, those are easier to get.

> Sealed relays are ok.

Thank you for such permission. I was using salvaged components
from junkyard electronics a half-century old and know how to test
things that are salvaged. Note: I'm not just making conversation
here,
I'm trying to point out a few things which defy Urban Myth and what
the ARRL deems 'useful' for amateurs.

> I also have a few really old ones here and so far
> they have never let me down. But I don't have enough to equip a filter
> bank with 15-20 in- and outputs. For that I've got a stash of HSMP-3810
> PIN diodes.

I'm not swayed or impressed by a bunch of house numbers. Neither do
I need over a dozen different things switching in/out. For that
matter, I've
tried out 3-penny-apiece 1N4148 diodes (100-lot price), plain old
ordinary
old-fashioned silicon switching diodes and they could work just fine
for
4 different HF circuits...but NOT easily for B+ at 100 VDC...and they
need
more circuitry for controlling them than just relay coils needing only
a back-
EMF clamp diode.

But, what the hey, if you are convinced in only your way of doing
things,
fine, go do it. Excuse me, I'm going off-line and spend some quality
workshop time putting some hardware together. QRT.

73, Len AF6AY

337. Re: Was my father's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-24 18:55:33 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <q6ayl.13445$pr6.4426@flpi149.ffdc.sbc.com>
Source record: 3240

AF6AY wrote:
> On Mar 23, 3:32 pm, Joerg <notthisjoerg...@removethispacbell.net>
> wrote:
>> AF6AY wrote:
>>> On Mar 21, 4:31 pm, Joerg <notthisjoerg...@removethispacbell.net>
>>> wrote:
>>>> AF6AY wrote:
>>>>> "Joerg" posted on Fri, Mar 20 2009 6:06 pm
>>>>>> ken scharf wrote:
>>>>>>> JIMMIE wrote:
>>>> Relays are ok in those applications, where there are actual currents
>>>> flowing. What I meant was pure signal switching with no DC currents.
>>> That's called "dry" switching in the electronics industry, has been
>>> called that for over a half century.
>>>> Sealed relays, Reeds, mercury-wetted and such work quite well there. But
>>>> non-sealed versions have issues and a snap-on plastic cap ain't a seal.
>>> Didn't say that that it was a seal. But...there are many kinds of
>>> 'seals' and there are many kinds of contact alloys which few hobbyists
>>> investigate.
>> Most must make do with whatever places such as Digikey offer at
>> affordable cost.
>
> I disagree considering that Digikey is one of the largest
> distributors
> in the world of electronics and offers so many different models AND
> price ranges. Then there is Mouser, and Newark, and Allied, and
> Jameco, and Ocean State, and Futurlec, and....a whole bunch of
> them. None of those are 'giving away' anything.
>

Sorry, maybe I didn't express it well enough. My point was that not
everyone has a mil budget or a Rockefeller-sized bank account ;-)

>> Sure, but in a car relays always switch something that draws a serious
>> current, more than a few milliamps. That works for a long time. Well,
>> until a "weld wart" shows up, like it did on a relay in out Genie garage
>> door opener.
>
> I will disagree again, but not on our particular Chevrolet...I only
> got a
> glance at the electronics wiring manual at a local dealership service
> shop and NOT all the controlled circuits were "serious current" ones.
> But, if you are convinced that they ALL are, I can't convince you...
>

Interesting, my car doesn't have that. Now I am curious. What are they
switching in a car where there is no DC current?

>> Hmm, I've had that happen even in $xxxxx lab gear, not quite
>> consumer-grade. Never really with mil gear though but those guys can
>> often design to "the sky's the limit" cost goals.
>
> Sorry, but that is URBAN MYTH among amateurs. What amateurs
> don't realize is that components are elevated in cost by EXTREME
> ENVIRONMENTS required. Sure, everything at room temperature
> works dandy and one can use any kind of schlock parts and get away
> with it. Freeze it below brass-monkey temps or heat it more than
> boiling water, drop-kick it across the room, run it under extreme
> vibration, it MUST WORK. Put most ham gear through that and you
> won't have enough left to sell anything but its manuals on e-bay.
> Been
> there, done that for years...its what I did for a living.
>

As I said this was high-Dollar lab gear. The kind where they don't even
flinch when an engineer says "this needs a piece of rigid coax".

> ----------------<on the AN/PRC-104 HF transceiver>
>> But I bet no expense was spared to pick the very best parts for that radio.
>
> I'll bet you've never seen the inside of it, let alone talk with any
> of the
> staff at Hughes Ground Systems that designed it. If you want to
> investigate it, the TMs (user to depot level) are available on the
> 'Web.

I've served (army), had to deal with radio/telco equipment. Cleaned many
relays there with Emery paper and alcohol. There is a reason for
instructions like this:

http://www.ansaldo-sts.com/EN/AnsaldoSTS/private/private_files/corporate/Mechanical_Relay_
Manuals/SM_4560_-_Instructions_for_Relay_Cleaning.pdf

> Hard to find and you may need special clearance to access some
> military sites nowadays, but it is available for nothing. If you want
> to
> pay money for such a manual, fine, those are easier to get.
>
>> Sealed relays are ok.
>
> Thank you for such permission. I was using salvaged components
> from junkyard electronics a half-century old and know how to test
> things that are salvaged. Note: I'm not just making conversation
> here,
> I'm trying to point out a few things which defy Urban Myth and what
> the ARRL deems 'useful' for amateurs.
>
>> I also have a few really old ones here and so far

>> they have never let me down. But I don't have enough to equip a filter
>> bank with 15-20 in- and outputs. For that I've got a stash of HSMP-3810
>> PIN diodes.
>
> I'm not swayed or impressed by a bunch of house numbers. Neither do
> I need over a dozen different things switching in/out. For that
> matter, I've
> tried out 3-penny-apiece 1N4148 diodes (100-lot price), plain old
> ordinary
> old-fashioned silicon switching diodes and they could work just fine
> for
> 4 different HF circuits...but NOT easily for B+ at 100 VDC...and they
> need
> more circuitry for controlling them than just relay coils needing only
> a back-
> EMF clamp diode.
>

Yep, usually a resistor plus on occasion a choke in series with it, and
enough voltage to be able to be able to reverse the diodes far enough.

> But, what the hey, if you are convinced in only your way of doing
> things,
> fine, go do it. Excuse me, I'm going off-line and spend some quality
> workshop time putting some hardware together. QRT.
>

Have fun :-)

I am going to have to repair a bench supply that blew its power
transistors way down in there. Not much fun.

--
73, Joerg

338. Re: Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-24 22:44:56 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <0idyl.14372$8_3.9875@flpi147.ffdc.sbc.com>
Source record: 3241

AF6AY wrote:
> Lawrence Statton posted on Sat, Mar 21 2009 6:46 am
>
>> "Unca Pete" <radioconnection@cox.net> writes:
>>> I'll join the ARRL the day I can choose QEX over the QST
>>> forced subscription that comes with the membership.
>>>
>>> Pete k1zjh
>> Have you ever thought of JOINING ARRL, and using your position as
>> a member to petition for this change?
>>
>> Change is made by those who participate.
>>
>> --N1GAK
>
> CHANGE is made by those who cozy up to the Old Boys Network of the
> League. The arch-conservatives there want only ONE thing: Preservation
> of their rank/status/title and the ability to Rule. The rest is just
> PR BS to convince members that They are 'for' members. As a voting
> member of the ARRL (until end of March) for two years, I've gotten a
> chance to 'vote' just once and then only for lower positions;
> candidacy for Director was unopposed so the incumbent was
> 'automatically' elevated to another term. Some 'voting,' not.
>

[...]

Ok, understood, although the ARRL Handbook was "the" eye opener for me
as a kid.

But:

>
> Len Anderson, AF6AY
> Life Member, IEEE (a Professional Association)
^^^^^^^^^^^^^^^^^^^^^^^^^^

Full disclosure: I am also an IEEE member. However, despite numerous
efforts by myself and others they could not even get the virtual
communities off the ground and with that dreaded web interface they
insist on keeping they never will. Now I haven't given up yet and one of
the forum admins is also pushing to at least provide a parallel
newsreader access. It certainly ain't rocket science. We'll see.

Then the "professional" side of their member benefits such as the
Financial Advantage Program or FAP. Yesterday I called for the umpteenth

time because a new client of mine wants to see professional liability insurance. The answer: As usual they will decline to quote because part of my job is to design medical devices. The topper was when they told me that the IEEE plan does not cover any work for a company outside the US (this one is) even if we'd exclude medical devices. Almost dropped my water bottle. Is the earth still flat and at the end of the oceans we'd fall off of it? And here I thought they had made it into the 21st century ...

Oh, and when I asked for a homeowners insurance quote a while ago the answer was "no plans available for the county where I live". To be honest, all this doesn't convey too much professionalism.

--
73, Joerg

339. Boys Book Of Radio And Electronics - Destroyed!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-25 13:40:35 UTC
From: RadioGuy <nospam@nospam.com>
Message-ID: <nvqyl.484582$Mh5.400664@bgtnsc04-news.ops.worldnet.att.net>
Source record: 3242

Childrens books (including Alfred Morgan's) before 1985 are being destroyed due to lead content in the ink as per Consumer Product Safety Commission ruling.

Please review article: http://www.city-journal.org/2009/eon0212wo.html

RG

340. Re: Boys Book Of Radio And Electronics - Destroyed!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-26 16:22:11 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <VYNyl.86214$9j5.23196@en-nntp-01.dc1.easynews.com>
Source record: 3243

"RadioGuy" <nospam@nospam.com> wrote in message
news:nvqyl.484582$Mh5.400664@bgtnsc04-news.ops.worldnet.att.net...
> Childrens books (including Alfred Morgan's) before 1985 are being destroyed
> due to lead content in the ink as per Consumer Product Safety Commission
> ruling.

Sounds dumb, but I'm not surprised. One of the downsides of living in a relatively modern society, I guess.

With the "lead in toys from China" fiasco last year, the lost Goodwills stopped accepting any toys 100%, apparently figuring that many consumers would use them as a "dumping ground" for recalled toys and not have the resources to verify whether specific incoming toys were on the recall list. :-(

341. Dual 200MHz AM/FM DDS RF Gen./LvlMeter Project

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-26 21:01:04 UTC
From: "Thomas M. Alldread" <tmall@telus.net>
Message-ID: <2jqns4pphv1h7gi9tqdrpvjqicedvfjvs9@4ax.com>
Source record: 3244

Greetings Fellow Surface Mount Construction Enthusiests:

Additional information on my new NimbleSig III dual output AM/FM,
relative phase controlled DDS signal generator/signal level meter
project currently being published in the first three 2009 issues of
the ARRL's QEX magazine can be found on my website at:

http://www3.telus.net/ta/NimbleSig%20III/

Note: The successful completion of this project requires good
surface mount construction skills and tools.

73 & Enjoy!
Tom, VA7TA
va7ta@telus.net

342. Re: Boys Book Of Radio And Electronics - Destroyed!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-26 22:54:23 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <2p1os45j6u9rqpdc17eiport9tpi4a70nh@4ax.com>
Source record: 3245

On Wed, 25 Mar 2009 13:40:35 GMT, "RadioGuy" <nospam@nospam.com>
wrote:

>Childrens books (including Alfred Morgan's) before 1985 are being destroyed
>due to lead content in the ink as per Consumer Product Safety Commission
>ruling.
>
>Please review article: http://www.city-journal.org/2009/eon0212wo.html
>
>RG
>
You need to read "Fahrenfeit 451" by Ray Bradbury I think.

John Ferrell W8CCW

343. Re: Boys Book Of Radio And Electronics - Destroyed!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-27 00:14:05 UTC
From: dave <dave@dave.dave>
Message-ID: <49cc1a4f$0$31214$bd467cd0@news.dslextreme.com>
Source record: 3246

John Ferrell wrote:
> On Wed, 25 Mar 2009 13:40:35 GMT, "RadioGuy" <nospam@nospam.com>
> wrote:
>
>> Childrens books (including Alfred Morgan's) before 1985 are being destroyed
>> due to lead content in the ink as per Consumer Product Safety Commission
>> ruling.
>>
>> Please review article: http://www.city-journal.org/2009/eon0212wo.html
>>
>> RG
>>
> You need to read "Fahrenfeit 451" by Ray Bradbury I think.
>
> John Ferrell W8CCW

It was two books. Boys' [First] Book of Radio and Electronics and

Boys' Second Book of Radio and Electronics.

I learned a lot more from The Radio Amateur's Handbook

344. Re: Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-27 00:49:50 UTC
From: AF6AY <LenAnderson@ieee.org>
Message-ID: <26b847ed-ade3-4897-a0bf-7ba1cdfaac0e@d25g2000prn.googlegroups.com>
Source record: 3247

On Mar 24, 3:44 pm, Joerg <notthisjoerg...@removethispacbell.net>
wrote:

>Full disclosure: I am also an IEEE member. However, despite numerous
>efforts by myself and others they could not even get the virtual...

You seem frustrated and are Venting about something that isn't even
remotely "homebrew." When you pick up on a signature, that is a sure
sign you are spoiling for some kind of Fight. <shrug>

I've been getting paid for moving electrons around, guiding fields and
waves for 56 years. I've been playing around with a slightly
different
area of electronics for 62 years as a pure hobbyist, not seeking some
kind of fame or notoriety or anything else, just for the fascination
of moving electrons the way I'd like them to move. I don't pretend to
be an "expert" in electronics or radio...just one who has been around
both the electronics industry (in rather different areas, not always
of my own chosing) and hobby electronics for a rather long time. I'd
thought that more people might be interested in some different ways to
do the same circuit tasks, therefore I suggested those from time to
time in places such as forums. Obviously not. Too many have THEIR
"best way" on things and what THEY do is "so much better." Sigh...

My enthusiasm for electronics got the better of me and, after a long
absence of not bothering to post anything in rec.radio.homebrew, I
brought up RELAYS as an ALTERNATE way of switching RF circuits at HF.
I will apologize for that since I can (obviously) see that some have
their "pet" ways of doing things and aren't open to suggestions.

I became a member of the IEEE late, in 1973. Dues-paying kind. Main
reason was to add to my WORK knowledge...that which paid for my
living.
I did not go into it for any "benefits" package advantages because I
had most such benefits already. I am not one to "fall" for
professional Advertising (I am a "hard sell" for all salespeople).
Under IEEE association bylaws, Life Membership is achieved solely by
tenure, no extra monies involved nor are accepted to achieve that.
On reaching Life Membership, NO dues are required, full membership
is free, and members get the informative membership magazine
"Spectrum" free every month. It is a Professional organization
because it is all about the Profession of electronics. I regard
myself as a "professional" for the simple reason of getting paid for
work in that field, like that work, like that play (as a hobbyist)
and have been doing it for over a half century. I've been fortunate

(sometimes unfortunate) to work in several varied disciplines within electronics and got interested in those disciplines. Sometimes the different techniques could apply themselves to hobby activities and sometimes hobby experiments were useful in professional work. There never has been a clear-cut demarkation line of technology between avocational activies and occupational activities except as forced by certain groups within the overall activity.

You will notice a "callsign" in my signature, that of an Amateur Extra class callsign group assigned by the FCC. I did not bother with getting my first-ever amateur radio license until some time in January 2007 and then to pass all test elements on one Sunday afternoon on 25 February 2007. I did that for two reasons: I was able to do it (and had the chutzpah to do so); it was a convenience to have the least restrictions on operation in what MIGHT have been an enjoyable pasttime in my retirement (I still work in electronics but only on my terms (therefore not often) and not in "regular hours." I run into the SAME sort of "I SHOULD have done it <so-and-so>" in nearly every field of endeavor where there are CERTAIN ways that things "MUST be done."

In a burst of enthusiasm, I joined the ARRL immediately after getting my federal amateur radio license grant (one cannot be a voting member without that grant according to League rules). That was another mistake I made. That AMATEUR organization membership is expiring at the end of March and I am not renewing. As a hobbyist, that AMATEUR membership has offered me almost NOTHING in return. I have voiced my opinion on that AMATEUR organization in OTHER forums, to the FCC on amateur radio regulations, and enought that I don't wish to go into it here. Despite having started in big time HF communications 56 years ago, long-time amateurs consider me a "newbie," a "beginner in radio" and that is disheartening, taking away much of my interest in ALL electronics.

In other forums NOT on amateur radio, I have been negatively criticized for being a member of certain organizations that the "expert" critics champion or dislike. For example, the ACM. the first professional association about computing worldwide. NOW, I see complaints about BENEFITS packages of the IEEE not meeting with certain individual's approval. I am not a follower nor an approver of Benefits Packages, nor a spokesperson of any kind for of those. There is very little in ANY Benefits Package that is of "benefit" in ANY homebrew electronics hobby activity. I will emphasize HOMEBREW. Radio. Electronics.

For all my time spent working with, or being hobbyist in, electronics, many and varied "experts" have TOLD me in no uncertain terms that "This is the way 'we' do it in <activity>." I MUST do it as those "experts" say. Sorry, but having been IN the activity for a long time and watching the technology CHANGE, to have NEW ways and components introduced since 1947, I have to throw that didactic

insistence (indeed a polemical philosophy) in the dumpster. If someone finds/discovers/innovates something while engaged in hombrewing some radio or other electronics, something NOT normally done but still follows established laws of physics, then it should be, in my viewpoint, be presented for other hobbyists. In the spirit of that being a possible useful thing that others might be able to use in their hobby activity. It should NOT be given in terms of "look what *I* did" as some claim to "expertise." It might be USEFUL to others in their hobby work. I feel that anyone who wants to discuss matters totally different than a forum's intended sphere of interest go find the appropriate forum to vent.

I've learned one more thing in Life here. Do not indicate one's affiliation or pride or other personal feelings in a "signature" of a posting...others do not like that. No matter, my amateur radio license callsign can get my legal address.

345. Re: Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-27 07:59:21 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <fca765c0-750c-48fc-aed7-6ecfc20d83c8@e35g2000yqc.googlegroups.com>
Source record: 3248

On Mar 18, 10:50 pm, RFI-EMI-GUY <Rhyol...@NETTALLY.COM> wrote:
> JIMMIE wrote:
> > I have 3 mast mounted nuvistor pre amps less power supplies. I was
> > looking for information on these to convert them to use on the 6 and 2
> > meter and 70cm ham bands. I may still have a power supply around but
> > as of yet I havent been able to find it. The pre amps are mount in a
> > somewhat egg shaped plastic container with twin lead connections on
> > them. Im not sure of the manufacturer. Schematics on the amplifiers
> > and power supplies would be nice. Directions on doing the mod would be
> > great. There are plans for ham band nuvistor preamps around so if I
> > could figure out what I have it shouldnt be that difficult to conver
> > it to what I want. Besides that it will give me something to do with
> > these old 6cw4s.
>
> > Jimmie
>
> You would do good to find a 70's or earlier ARRL handbook. There were
> many articles about Nuvistors.
>
> --
> Joe Leikhim K4SAT
> "The RFI-EMI-GUY"©
>
> "Use only Genuine Interocitor Parts" Tom Servo ;-P

Well I got a little 2M nuvistor pre-amp put together last night. Im
not sure of the noise figure of the amp but according to my S meter it
must have about at least 20 db of gain, maybe 30.

I will have to take it into work were I have the test equipment to
check it out better.

Jimmie

346. Re: Boys Book Of Radio And Electronics - Destroyed!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-27 11:57:14 UTC
From: RadioGuy <nospam@nospam.com>
Message-ID: <ua3zl.84854$4m1.66260@bgtnsc05-news.ops.worldnet.att.net>
Source record: 3249

"dave" <dave@dave.dave> wrote in message
news:49cc1a4f$0$31214$bd467cd0@news.dslextreme.com...
> John Ferrell wrote:
>> On Wed, 25 Mar 2009 13:40:35 GMT, "RadioGuy" <nospam@nospam.com>
>> wrote:
>>
>>> Childrens books (including Alfred Morgan's) before 1985 are being
>>> destroyed due to lead content in the ink as per Consumer Product Safety
>>> Commission ruling.
>>>
>>> Please review article: http://www.city-journal.org/2009/eon0212wo.html
>>>
>>> RG
>> You need to read "Fahrenfeit 451" by Ray Bradbury I think.
>>
>> John Ferrell W8CCW
>
> It was two books. Boys' [First] Book of Radio and Electronics and
>
> Boys' Second Book of Radio and Electronics.
>
> I learned a lot more from The Radio Amateur's Handbook

I wonder... what's to stop them from going beyond children books? Besides, what is a children's book http://en.wikipedia.org/wiki/Children's_books I never did find a suitable definition and for the precocious child it could be anything. And for that matter, what about any pre-1985 book in the vicinity of children. I can see how can this develop over time... handlers of books will slowly avoid any pre-1985 books from fear of liability suits---perhaps even history books printed in the 1940's. Consider the overall results 50 years from now.

Yes... I went through the first, second, third and fourth 'Boy's Book'. I built the crystal sets, one transistor CK722 amplifier, one tube amplifier and Geiger Counter. I wish I could afford collecting those old Morgan books but at $100 or more each forget it. Then there were those countless ARRL publications from QST to the 'Handbook' with those big B&W photos of goregous point-to-point wiring with lead ink that I would drool over for countless hours.

With regard to '451', the theme of censorship has appeared in many novels in widely different plots... but they all express censorship and attempt the control of thoughts and ideas. The CPSC ruling is a disturbing precedent!

Perhaps the digitizing of books may be a safe recourse---but who can be trusted to make the selections of what to digitize, who will maintain and oversee electronic libraries?

RG

347. Re: Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-27 12:22:26 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <1b2b82c0-a044-4a64-94b7-b380ec118c23@l22g2000vba.googlegroups.com>
Source record: 3250

On Mar 27, 3:59 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> On Mar 18, 10:50 pm, RFI-EMI-GUY <Rhyol...@NETTALLY.COM> wrote:
>
>
>
>
>
> > JIMMIE wrote:
> > > I have 3 mast mounted nuvistor pre amps less power supplies. I was
> > > looking for information on these to convert them to use on the 6 and 2
> > > meter and 70cm ham bands. I may still have a power supply around but
> > > as of yet I havent been able to find it. The pre amps are mount in a
> > > somewhat egg shaped plastic container with twin lead connections on
> > > them. Im not sure of the manufacturer. Schematics on the amplifiers
> > > and power supplies would be nice. Directions on doing the mod would be
> > > great. There are plans for ham band nuvistor preamps around so if I
> > > could figure out what I have it shouldnt be that difficult to conver
> > > it to what I want. Besides that it will give me something to do with
> > > these old 6cw4s.
>
> > > Jimmie
>
> > You would do good to find a 70's or earlier ARRL handbook. There were
> > many articles about Nuvistors.
>
> > --
> > Joe Leikhim K4SAT
> > "The RFI-EMI-GUY"©
>
> > "Use only Genuine Interocitor Parts" Tom Servo ;-P
>
> Well I got a little 2M nuvistor pre-amp put together last night. Im
> not sure of the noise figure of the amp but according to my S meter it
> must have about at least 20 db of gain, maybe 30.
>
> I will have to take it into work were I have the test equipment to
> check it out better.
>
> Jimmie- Hide quoted text -
>
> - Show quoted text -

Anyone know what kind of noise figure I could expect out of a 6cw4
nuvistor preamp. I only saw one reference and it mentioned 3db but

mostly all the other references just talked about gain.

Jimmie

348. Re: Boys Book Of Radio And Electronics - Destroyed!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-27 13:52:53 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <c5abd0cd-e5c6-4f2a-b119-6ff2ea3c6c6f@e25g2000vbe.googlegroups.com>
Source record: 3001

On Mar 27, 7:57 am, "RadioGuy" <nos...@nospam.com> wrote:
> "dave" <d...@dave.dave> wrote in message
>
> news:49cc1a4f$0$31214$bd467cd0@news.dslextreme.com...
>
>
>
>
>
> > John Ferrell wrote:
> >> On Wed, 25 Mar 2009 13:40:35 GMT, "RadioGuy" <nos...@nospam.com>
> >> wrote:
>
> >>> Childrens books (including Alfred Morgan's) before 1985 are being
> >>> destroyed due to lead content in the ink as per Consumer Product Safety
> >>> Commission ruling.
>
> >>> Please review article:http://www.city-journal.org/2009/eon0212wo.html
>
> >>> RG
> >> You need to read "Fahrenfeit 451" by Ray Bradbury I think.
>
> >> John Ferrell W8CCW
>
> > It was two books. Boys' [First] Book of Radio and Electronics and
>
> > Boys' Second Book of Radio and Electronics.
>
> > I learned a lot more from The Radio Amateur's Handbook
>
> I wonder... what's to stop them from going beyond children books? Besides,
> what is a children's bookhttp://en.wikipedia.org/wiki/Children's_booksI
> never did find a suitable definition and for the precocious child it could
> be anything. And for that matter, what about any pre-1985 book in the
> vicinity of children. I can see how can this develop over time... handlers
> of books will slowly avoid any pre-1985 books from fear of liability
> suits---perhaps even history books printed in the 1940's. Consider the
> overall results 50 years from now.
>
> Yes... I went through the first, second, third and fourth 'Boy's Book'. I
> built the crystal sets, one transistor CK722 amplifier, one tube amplifier
> and Geiger Counter. I wish I could afford collecting those old Morgan books
> but at $100 or more each forget it. Then there were those countless ARRL
> publications from QST to the 'Handbook' with those big B&W photos of

> goregous point-to-point wiring with lead ink that I would drool over for
> countless hours.
>
> With regard to '451', the theme of censorship has appeared in many novels in
> widely different plots... but they all express censorship and attempt the
> control of thoughts and ideas. The CPSC ruling is a disturbing precedent!
>
> Perhaps the digitizing of books may be a safe recourse---but who can be
> trusted to make the selections of what to digitize, who will maintain and
> oversee electronic libraries?
>
> RG- Hide quoted text -
>
> - Show quoted text -

I had all the Boy's Books, I bought them from a local library for $.50
a piece. unfortunately they were all lost along with 50s and 60s ARRL
handbooks when my rental storage got brooken into.

Jimmie

349. Re: Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-27 14:37:59 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <1fa6b8fd-e7bc-4086-a7ec-d10034d599de@m36g2000vbp.googlegroups.com>
Source record: 3002

On Mar 27, 8:22 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> On Mar 27, 3:59 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
>
>
>
> > On Mar 18, 10:50 pm, RFI-EMI-GUY <Rhyol...@NETTALLY.COM> wrote:
>
> > > JIMMIE wrote:
> > > > I have 3 mast mounted nuvistor pre amps less power supplies. I was
> > > > looking for information on these to convert them to use on the 6 and 2
> > > > meter and 70cm ham bands. I may still have a power supply around but
> > > > as of yet I havent been able to find it. The pre amps are mount in a
> > > > somewhat egg shaped plastic container with twin lead connections on
> > > > them. Im not sure of the manufacturer. Schematics on the amplifiers
> > > > and power supplies would be nice. Directions on doing the mod would be
> > > > great. There are plans for ham band nuvistor preamps around so if I
> > > > could figure out what I have it shouldnt be that difficult to conver
> > > > it to what I want. Besides that it will give me something to do with
> > > > these old 6cw4s.
>
> > > > Jimmie
>
> > > You would do good to find a 70's or earlier ARRL handbook. There were
> > > many articles about Nuvistors.
>
> > > --
> > > Joe Leikhim K4SAT
> > > "The RFI-EMI-GUY"©
>
> > > "Use only Genuine Interocitor Parts" Tom Servo ;-P
>
> > Well I got a little 2M nuvistor pre-amp put together last night. Im
> > not sure of the noise figure of the amp but according to my S meter it
> > must have about at least 20 db of gain, maybe 30.
>
> > I will have to take it into work were I have the test equipment to
> > check it out better.
>
> > Jimmie- Hide quoted text -
>
> > - Show quoted text -
>
> Anyone know what kind of noise figure I could expect out of a 6cw4
> nuvistor preamp. I only saw one reference and it mentioned 3db but

> mostly all the other references just talked about gain.
>
> Jimmie

Hey OM

The reason you see those high noise figures: Carbon comp resistors being used in tube circuits. The gain of the preamp amplifies the noise of the carbon comp resistors. Best is to use metal film resistors much lower noise.
And squeezing 20db out of a 6cw4 that has only gain of around 64 or about 14 db is quite the feat.

73 OM
de n8zu

350. Re: Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-27 15:06:23 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <QU5zl.4490$Lr6.1168@flpi143.ffdc.sbc.com>
Source record: 3003

AF6AY wrote:
> On Mar 24, 3:44 pm, Joerg <notthisjoerg...@removethispacbell.net>
> wrote:
>
>> Full disclosure: I am also an IEEE member. However, despite numerous
>> efforts by myself and others they could not even get the virtual...
>
> You seem frustrated and are Venting about something that isn't even
> remotely "homebrew." When you pick up on a signature, that is a sure
> sign you are spoiling for some kind of Fight. <shrug>
>

Not a pick of a fight, I am not that kind of guy. Has in part to do with my other affiliation (church). I just found it a bit strange when you blasted the ARRL and at the end in the sig line listed IEEE as a professional organization. Which I do not see quite that way.

> I've been getting paid for moving electrons around, guiding fields and
> waves for 56 years. I've been playing around with a slightly
> different
> area of electronics for 62 years as a pure hobbyist, not seeking some
> kind of fame or notoriety or anything else, just for the fascination
> of moving electrons the way I'd like them to move. I don't pretend to
> be an "expert" in electronics or radio...just one who has been around
> both the electronics industry (in rather different areas, not always
> of my own chosing) and hobby electronics for a rather long time. I'd
> thought that more people might be interested in some different ways to
> do the same circuit tasks, therefore I suggested those from time to
> time in places such as forums. Obviously not. Too many have THEIR
> "best way" on things and what THEY do is "so much better." Sigh...
>
> My enthusiasm for electronics got the better of me and, after a long
> absence of not bothering to post anything in rec.radio.homebrew, I
> brought up RELAYS as an ALTERNATE way of switching RF circuits at HF.
> I will apologize for that since I can (obviously) see that some have
> their "pet" ways of doing things and aren't open to suggestions.

Not a pet way. All I wanted to do is show the pitfalls because newer hobbysits need to be aware of those. For high-powered stuff I also use relays, just as you do.

> ------------------
> I became a member of the IEEE late, in 1973. Dues-paying kind. Main
> reason was to add to my WORK knowledge...that which paid for my
> living.

> I did not go into it for any "benefits" package advantages because I
> had most such benefits already. I am not one to "fall" for
> professional Advertising (I am a "hard sell" for all salespeople).
> Under IEEE association bylaws, Life Membership is achieved solely by
> tenure, no extra monies involved nor are accepted to achieve that.
> On reaching Life Membership, NO dues are required, full membership
> is free, and members get the informative membership magazine
> "Spectrum" free every month. It is a Professional organization
> because it is all about the Profession of electronics. ...

I wish it was professional all the way, not just partly. The last FAP mailer from them with the "professionality" level of a credit card solicitation came Friday. Well, at least it was useful to start the wood stove ;-)

> ... I regard
> myself as a "professional" for the simple reason of getting paid for
> work in that field, like that work, like that play (as a hobbyist)
> and have been doing it for over a half century. I've been fortunate
> (sometimes unfortunate) to work in several varied disciplines within
> electronics and got interested in those disciplines. Sometimes the
> different techniques could apply themselves to hobby activities and
> sometimes hobby experiments were useful in professional work. There
> never has been a clear-cut demarkation line of technology between
> avocational activies and occupational activities except as forced by
> certain groups within the overall activity.
>

That's a great career, when you can bring hobby experience into professional work. Same here, but only about 25 years pro work experience since my degree. Lots of homebrew electronics before that. However, I don't see this kind of cross-fertilization between hobby and professional life happen much in the next generation :-(

> You will notice a "callsign" in my signature, that of an Amateur
> Extra class callsign group assigned by the FCC. I did not bother
> with getting my first-ever amateur radio license until some time
> in January 2007 and then to pass all test elements on one Sunday
> afternoon on 25 February 2007. I did that for two reasons: I was
> able to do it (and had the chutzpah to do so); it was a
> convenience to have the least restrictions on operation in what
> MIGHT have been an enjoyable pasttime in my retirement (I still
> work in electronics but only on my terms (therefore not often) and
> not in "regular hours." I run into the SAME sort of "I SHOULD have
> done it <so-and-so>" in nearly every field of endeavor where there
> are CERTAIN ways that things "MUST be done."
>
> In a burst of enthusiasm, I joined the ARRL immediately after
> getting my federal amateur radio license grant (one cannot be a
> voting member without that grant according to League rules). That
> was another mistake I made. That AMATEUR organization membership is

> expiring at the end of March and I am not renewing. As a hobbyist,
> that AMATEUR membership has offered me almost NOTHING in return.

Ok, can't speak to that because I was a member in the German club (DARC). But ARRL did one great thing for me: Very low cost books, full of very useful technical information. Lots of stuff and antennas were built with the help of ARRL books.

> I have voiced my opinion on that AMATEUR organization in OTHER
> forums, to the FCC on amateur radio regulations, and enought that
> I don't wish to go into it here. Despite having started in big time
> HF communications 56 years ago, long-time amateurs consider me a
> "newbie," a "beginner in radio" and that is disheartening, taking
> away much of my interest in ALL electronics.
>

I remember that, in Germany call signs were issued in alphanumeric order (like non-vanity license plates in most states here) and some hams had the tendency of prejudice. Newer call sign ... aha, rookie. Which just wasn't true in many cases.

> In other forums NOT on amateur radio, I have been negatively
> criticized for being a member of certain organizations that the
> "expert" critics champion or dislike. For example, the ACM.
> the first professional association about computing worldwide.
> NOW, I see complaints about BENEFITS packages of the IEEE not
> meeting with certain individual's approval. I am not a follower
> nor an approver of Benefits Packages, nor a spokesperson of any
> kind for of those. ...

Just my humble opinion: If an organization can't get commercial products like FAP straight they ought to dump them and not keep them to make a penny. It's unprofessional, no matter what organization. And PL insurance is not a benefit, it's a paid commercial product that numerous members direly need in this case. Note the other thing I mentioned, much more important: Member forums, has to do with learning, helping others, exactly what also happens in a hobby. It ain't rocket science to set that up yet they blew it. Like you were with ARRL I was twice just about to ditch my IEEE membership but didn't at the last minute. Haven't given up hope yet, but I've learned that one has to be rather loud in the IEEE to be heard. It seems there are strict hierarchies that slow things down a lot. It should not be that way.

> ... There is very little in ANY Benefits Package
> that is of "benefit" in ANY homebrew electronics hobby activity.
> I will emphasize HOMEBREW. Radio. Electronics.
>

Right. Once you are retired, or mostly retired in your case, and insured by Medicare none of that insurance stuff matters anymore. But it does matter to the majority of members who aren't there yet. My advice to them would be: If you can't offer it as a decent product, don't offer it

at all. Just like I (and probably you) would not want to be engaged in
an engineering project we didn't believe in.

> For all my time spent working with, or being hobbyist in, electronics,
> many and varied "experts" have TOLD me in no uncertain terms that
> "This is the way 'we' do it in <activity>." I MUST do it as those
> "experts" say. Sorry, but having been IN the activity for a long
> time and watching the technology CHANGE, to have NEW ways and
> components introduced since 1947, I have to throw that didactic
> insistence (indeed a polemical philosophy) in the dumpster. If
> someone finds/discovers/innovates something while engaged in
> hombrewing some radio or other electronics, something NOT normally
> done but still follows established laws of physics, then it should
> be, in my viewpoint, be presented for other hobbyists. In the
> spirit of that being a possible useful thing that others might be
> able to use in their hobby activity. It should NOT be given in
> terms of "look what *I* did" as some claim to "expertise." It
> might be USEFUL to others in their hobby work. I feel that anyone
> who wants to discuss matters totally different than a forum's
> intended sphere of interest go find the appropriate forum to vent.
>
> I've learned one more thing in Life here. Do not indicate one's
> affiliation or pride or other personal feelings in a
> "signature" of a posting...others do not like that. ...

Should be ok to do that. But people will see it and might react to it ;-)

> ... No matter,
> my amateur radio license callsign can get my legal address.
>

Mine's DK9JK. Not active at all right now though. Once I retire I plan
to sit for the US license exam just like you did. Probably will start
back out on 15m and 40m, CW and SSB, and maybe some of the newer modes.

--
73, Joerg

351. Re: Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-27 15:10:01 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <666c4758-2b50-4853-bf02-45561a195c42@r3g2000vbp.googlegroups.com>
Source record: 3004

```
On Mar 27, 10:37 am, raypsi <RBorow...@gmail.com> wrote:
> On Mar 27, 8:22 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
>
>
>
>
>
> > On Mar 27, 3:59 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
>
> > > On Mar 18, 10:50 pm, RFI-EMI-GUY <Rhyol...@NETTALLY.COM> wrote:
>
> > > > JIMMIE wrote:
> > > > > I have 3 mast mounted nuvistor pre amps less power supplies. I was
> > > > > looking for information on these to convert them to use on the 6 and 2
> > > > > meter  and 70cm ham bands. I may still have a power supply around but
> > > > > as of yet I havent been able to find it. The pre amps are mount in a
> > > > > somewhat egg shaped plastic container with twin lead connections on
> > > > > them. Im not sure of the manufacturer. Schematics on the amplifiers
> > > > > and power supplies would be nice. Directions on doing the mod would be
> > > > > great. There are plans for ham band nuvistor preamps around so if I
> > > > > could figure out what I have it shouldnt be that difficult to conver
> > > > > it to what I want. Besides that it will give me something to do with
> > > > > these old 6cw4s.
>
> > > > > Jimmie
>
> > > > You would do good to find a 70's or earlier ARRL handbook. There were
> > > > many articles about Nuvistors.
>
> > > > --
> > > > Joe Leikhim K4SAT
> > > > "The RFI-EMI-GUY"©
>
> > > > "Use only Genuine Interocitor Parts" Tom Servo  ;-P
>
> > > Well I got a little 2M nuvistor pre-amp put together last night. Im
> > > not sure of the noise figure of the amp but according to my S meter it
> > > must have about at least 20 db of gain, maybe 30.
>
> > > I will have to take it into work were I have the  test equipment to
> > > check it out better.
>
> > > Jimmie- Hide quoted text -
>
```

> > > - Show quoted text -
>
> > Anyone know what kind of noise figure I could expect out of a 6cw4
> > nuvistor preamp. I only saw one reference and it mentioned 3db but
> > mostly all the other references just talked about gain.
>
> > Jimmie
>
> Hey OM
>
> The reason you see those high noise figures: Carbon comp resistors
> being used in tube circuits. The gain of the preamp amplifies the
> noise of the carbon comp resistors. Best is to use metal film
> resistors much lower noise.
> And squeezing 20db out of a 6cw4 that has only gain of around 64 or
> about 14 db is quite the feat.
>
> 73 OM
> de n8zu- Hide quoted text -
>
> - Show quoted text -

Yeah I used metal film on my preamp. I tossed all of my carbon resistors a few years ago after I fixed a guitar amp for a friend and he brought it back telling me how noisy it was. I traced the problem back to the NOS(40 years) resistors I had used.

Like I said those were S meter db. :))

Jimmie

352. Re: Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-27 16:43:39 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <5n7zl.10750$%54.6437@nlpi070.nbdc.sbc.com>
Source record: 3005

JIMMIE wrote:
> On Mar 27, 3:59 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
>> On Mar 18, 10:50 pm, RFI-EMI-GUY <Rhyol...@NETTALLY.COM> wrote:
>>
>>
>>
>>
>>
>>> JIMMIE wrote:
>>>> I have 3 mast mounted nuvistor pre amps less power supplies. I was
>>>> looking for information on these to convert them to use on the 6 and 2
>>>> meter and 70cm ham bands. I may still have a power supply around but
>>>> as of yet I havent been able to find it. The pre amps are mount in a
>>>> somewhat egg shaped plastic container with twin lead connections on
>>>> them. Im not sure of the manufacturer. Schematics on the amplifiers
>>>> and power supplies would be nice. Directions on doing the mod would be
>>>> great. There are plans for ham band nuvistor preamps around so if I
>>>> could figure out what I have it shouldnt be that difficult to conver
>>>> it to what I want. Besides that it will give me something to do with
>>>> these old 6cw4s.
>>>> Jimmie
>>> You would do good to find a 70's or earlier ARRL handbook. There were
>>> many articles about Nuvistors.
>>> --
>>> Joe Leikhim K4SAT
>>> "The RFI-EMI-GUY"ï¿½
>>> "Use only Genuine Interocitor Parts" Tom Servo ;-P
>> Well I got a little 2M nuvistor pre-amp put together last night. Im
>> not sure of the noise figure of the amp but according to my S meter it
>> must have about at least 20 db of gain, maybe 30.
>>
>> I will have to take it into work were I have the test equipment to
>> check it out better.
>>
>> Jimmie- Hide quoted text -
>>
>> - Show quoted text -
>
> Anyone know what kind of noise figure I could expect out of a 6cw4
> nuvistor preamp. I only saw one reference and it mentioned 3db but
> mostly all the other references just talked about gain.
>

From vague memory I think Geloso used them a lot and got a little under
4dB out of those on 144MHz. In case anyone needs a datasheet:

http://www.r-type.org/pdfs/6cw4.pdf

--
73, Joerg

353. Re: Boys Book Of Radio And Electronics - Destroyed!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-27 20:42:13 UTC
From: Bill M <radioexray@geemail.com>
Message-ID: <gqjdn601lsv@news4.newsguy.com>
Source record: 3006

http://www.snopes.com/inboxer/pending/cpsia.asp

354. Re: Boys Book Of Radio And Electronics - Destroyed!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-27 20:51:32 UTC
From: Unca Pete <radioconnection@cox.net>
Message-ID: <D%azl.206438$fM1.90024@newsfe14.iad>
Source record: 3007

"Bill M" <radioexray@geemail.com> wrote in message
news:gqjdn601lsv@news4.newsguy.com...
> http://www.snopes.com/inboxer/pending/cpsia.asp

A careful reading still implies that vendors should be suspious
of items made prior to 1985. That date is the crux of matter.
Vendors selling used post 1985 items would be free to assume they
are safe....

355. Re: Boys Book Of Radio And Electronics - Destroyed!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-28 14:16:20 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <feqzl.22031$qa.11908@bignews4.bellsouth.net>
Source record: 3008

RadioGuy wrote:
> Childrens books (including Alfred Morgan's) before 1985 are being destroyed
> due to lead content in the ink as per Consumer Product Safety Commission
> ruling.
>
> Please review article: http://www.city-journal.org/2009/eon0212wo.html
>
> RG
>
>
The lead content in ink would be very low, and only could poison you if
you ATE the book. Any child who would read one of the Morgan books
would be old enough to no longer be chewing on books.

Of course such books shouldn't be thrown in landfill (and burning them
would be bad too as it would release the lead to the atmosphere!).

356. Re: Boys Book Of Radio And Electronics - Destroyed!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-28 14:46:02 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <a0b80737-27c6-4615-83cf-02436776d917@j8g2000yql.googlegroups.com>
Source record: 3009

On Mar 28, 10:16 am, ken scharf <wa2mzeNOSPAMB...@bellsouth.net>
wrote:
> RadioGuy wrote:
> > Childrens books (including Alfred Morgan's) before 1985 are being destroyed
> > due to lead content in the ink as per Consumer Product Safety Commission
> > ruling.
>
> > Please review article:http://www.city-journal.org/2009/eon0212wo.html
>
> > RG
>
> The lead content in ink would be very low, and only could poison you if
> you ATE the book. Any child who would read one of the Morgan books
> would be old enough to no longer be chewing on books.
>
> Of course such books shouldn't be thrown in landfill (and burning them
> would be bad too as it would release the lead to the atmosphere!).

Its probably more likely they would eat it instead of reading it.

Jimmie

357. Radio books

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-28 15:06:08 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <149d9b88-500e-4a6e-b83a-a14110d93d8f@q16g2000yqg.googlegroups.com>
Source record: 3010

I am trying to remember the name of a radio book that was stolen from me years ago. It was a simple entry level book that had construction projects. It featured a series of valve transmitter each a little more complex and powerful than the next. A 1 valve 2 valve and a 3 valve tx that would put out 75 watts and used an 829B in the final in a push-pull configuration. It wasnt a large book and I remember the cover was black. Also stolen was a science project book that showed how to build cloud chambers, your own x- ray machine and a particle accelerator. I built the xray machiine and most of a siesmograph. I had put the siesmograph project on hold because I couldnt find some of the key parts.

Jimmie

358. Re: 6M amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-28 15:45:30 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <Wsrzl.21782$v8.21235@bignews5.bellsouth.net>
Source record: 3011

JIMMIE wrote:
> On Mar 22, 4:25 pm, "Unca Pete" <radioconnect...@cox.net> wrote:
>> I'd think an old Ohmmite Z-50 would be ideal. Wonder
>> what the value in uH was?
>>
>> Pete
>
> I thought about a Z-50. I have one I use on a 6 Meter amp using a pair
> of 6146Bs. I didnt know if it would work with the 4cx250s or not.
>
> 6.8 uh rings a bell but Im not sure.
>
> Id rather wind my own if it will keep me from having to pull out the
> credit card and pay more shipping than what the thing cost.
>
>
> Jimme
Any choke that is not self resonant at 50MHz and has enough inductance to give an impedance at least 10 times the plate load resistance will work. It, of course, must be able to handle the required voltage and current. The form can be ceramic, Teflon, or any material that does not absorb RF at 50 MHz. An air wound choke will work too, but would have to be wound with thick enough wire to be self supporting, and it might be hard to meet the other requirements with this type of construction.

359. Re: Was my father's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-28 15:51:53 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <Wyrzl.21784$v8.10557@bignews5.bellsouth.net>
Source record: 3012

Joerg wrote:
> JIMMIE wrote:
>> On Mar 21, 5:11 pm, Joerg <notthisjoerg...@removethispacbell.net>
>> wrote:
>>> JIMMIE wrote:
>>>> On Mar 20, 6:47 pm, ken scharf <wa2mzeNOSPAMB...@bellsouth.net> wrote:
>>>>> JIMMIE wrote:
>>>>>> On Mar 18, 9:24 pm, Robert casey <wa2...@ix.netcom.com> wrote:
>>>>>>>> The design used plug-in coils for the osc and rf stages, and
>>>>>> they were double conversion designs, with a first IF of
>>>>>> 1600 kc and a second IF of either 100 kc or 85 kc (when
>>>>>> using surplus ARC-5 IFTs.) The 1800 mc xtal you bought
>>>>>> your dad was used for the second coversion osc. to convert
>>>>>> the 1600 kc IF down to 100 kc. Many hams deviated from
>>>>>> the exact original IF frequencies (i.e. strong local BC
>>>>>> station on 1600 kc) which might explain why the xtal
>>>>>>>> was chosen for 1800 kc instead of 1500 or 1700.
>>>>>> We have a local mid power station at 1600KHz, WWRL, at my
>>>>>> parents' house,
>>>>>> so my father might have wanted to avoid problems with it.
>>>>>> His radio had a bandswitch instead of plug in coils, and he'd
>>>>>> receive
>>>>>> various broadcast SW stations. He wasn't a ham at the time just
>>>>>> yet.
>>>>>> I had a friend who was a retired engineer with GE turned TV tech who
>>>>>> built
>>>>>> one with a band switch and he later modified it to
>>>>>> be more of a general purpose SW receiver. His name was Olin Griggs.
>>>>>> Jimmie.
>>>>> I once saw an article in 73 magazine showing a HB receiver that used a
>>>>> re-worked turret tv tuner as a band switch. The coils were re-wound
>>>>> onto the original forms, but some have just replaced the forms with
>>>>> some
>>>>> of the smaller sized toroid cores. I have a bunch of old tv tuners in
>>>>> the junk box, but over the years the contacts have gone bad and now
>>>>> show
>>>>> a high resistance. Maybe they could be cleaned up, but it no longer
>>>>> seems worth the effort. My new idea is to use miniature relays to
>>>>> switch the circuits. I recently found nearly a gross of small relays
>>>>> for free so why not?- Hide quoted text -
>>>>> - Show quoted text -
>>>> I tried the TV tuner trick one time and it didnt work well at all.
>>>> Most tuners are tossed because the contacts fail. ...
>>> Not really. Back then TVs were often tossed because the flyback xfmr had

>>> blown and repair was deemed uneconomical. Or someone said that because
>>> in reality they wanted that brand spanking new set that was one sale.
>>>
>>> But this is so long ago that if there's any left the contacts will have
>>> corrodes away.
>>>
>>> [...]
>>>
>>> --
>>> 73, Joerg- Hide quoted text -
>>>
>>> - Show quoted text -
>>
>> You must be younger than me, Ive replaced a lot of TV tuners and
>> flybacks. It was in the early 80s that i first noticed
>> TVs becoming diposable and quit working on them. Luckily for me there
>> was still a lot of other electtronic repair work needed to be done.
>> Most of the local industry was becoming more electronic oriented in
>> their equipment and needed someone to maintain their equipment but did
>> not want to hire a full time tech. The sawmills, textile plants, food
>> processing plants kept me pretty busy aand i enjoyed the work much
>> more not having to deal with the usual customers.
>>
>
> Same here, in the early 80's I began to refuse fixing TVs and stuff. But
> even before that, I remember the flyback transformers for some sets
> being so outrageously expensive that a repair plain didn't make sense.
> Especially if it had taken out the H-deflection tube and some other
> stuff with it or the set itself had already been quite tired at the time
> it hissed its good-bye. This was in Europe.
>
I once fixed my parents tv by replacing the yoke, and I more recently
fixed my wife's tv set by replacing the flyback (AND the horizontal
output transistor). The first set was a tube type Zenith B&W 19"
portable. The second was a Trinitron color portable.
I think you still can get replacement yokes, flybacks, and even CRT's
for recent tv's. Good luck getting anything else!

360. Re: Was my father's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-28 16:13:23 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <ZWrzl.14543$8_3.6723@flpi147.ffdc.sbc.com>
Source record: 3013

ken scharf wrote:
> Joerg wrote:
>> JIMMIE wrote:
>>> On Mar 21, 5:11 pm, Joerg <notthisjoerg...@removethispacbell.net>
>>> wrote:
>>>> JIMMIE wrote:
>>>>> On Mar 20, 6:47 pm, ken scharf <wa2mzeNOSPAMB...@bellsouth.net> wrote:
>>>>>> JIMMIE wrote:
>>>>>>> On Mar 18, 9:24 pm, Robert casey <wa2...@ix.netcom.com> wrote:
>>>>>>>> The design used plug-in coils for the osc and rf stages, and
>>>>>>>> they were double conversion designs, with a first IF of
>>>>>>>> 1600 kc and a second IF of either 100 kc or 85 kc (when
>>>>>>>> using surplus ARC-5 IFTs.) The 1800 mc xtal you bought
>>>>>>>> your dad was used for the second coversion osc. to convert
>>>>>>>> the 1600 kc IF down to 100 kc. Many hams deviated from
>>>>>>>> the exact original IF frequencies (i.e. strong local BC
>>>>>>>> station on 1600 kc) which might explain why the xtal
>>>>>>>> was chosen for 1800 kc instead of 1500 or 1700.
>>>>>>> We have a local mid power station at 1600KHz, WWRL, at my
>>>>>>> parents' house,
>>>>>>> so my father might have wanted to avoid problems with it.
>>>>>>> His radio had a bandswitch instead of plug in coils, and he'd
>>>>>>> receive
>>>>>>> various broadcast SW stations. He wasn't a ham at the time just
>>>>>>> yet.
>>>>>>> I had a friend who was a retired engineer with GE turned TV tech who
>>>>>>> built
>>>>>>> one with a band switch and he later modified it to
>>>>>>> be more of a general purpose SW receiver. His name was Olin Griggs.
>>>>>>> Jimmie.
>>>>>> I once saw an article in 73 magazine showing a HB receiver that
>>>>>> used a
>>>>>> re-worked turret tv tuner as a band switch. The coils were re-wound
>>>>>> onto the original forms, but some have just replaced the forms
>>>>>> with some
>>>>>> of the smaller sized toroid cores. I have a bunch of old tv
>>>>>> tuners in
>>>>>> the junk box, but over the years the contacts have gone bad and
>>>>>> now show
>>>>>> a high resistance. Maybe they could be cleaned up, but it no longer
>>>>>> seems worth the effort. My new idea is to use miniature relays to
>>>>>> switch the circuits. I recently found nearly a gross of small relays
>>>>>> for free so why not?- Hide quoted text -
>>>>>> - Show quoted text -

>>>>> I tried the TV tuner trick one time and it didnt work well at all.
>>>>> Most tuners are tossed because the contacts fail. ...
>>>> Not really. Back then TVs were often tossed because the flyback xfmr
>>>> had
>>>> blown and repair was deemed uneconomical. Or someone said that because
>>>> in reality they wanted that brand spanking new set that was one sale.
>>>>
>>>> But this is so long ago that if there's any left the contacts will have
>>>> corrodes away.
>>>>
>>>> [...]
>>>>
>>>> --
>>>> 73, Joerg- Hide quoted text -
>>>>
>>>> - Show quoted text -
>>>
>>> You must be younger than me, Ive replaced a lot of TV tuners and
>>> flybacks. It was in the early 80s that i first noticed
>>> TVs becoming diposable and quit working on them. Luckily for me there
>>> was still a lot of other electtronic repair work needed to be done.
>>> Most of the local industry was becoming more electronic oriented in
>>> their equipment and needed someone to maintain their equipment but did
>>> not want to hire a full time tech. The sawmills, textile plants, food
>>> processing plants kept me pretty busy aand i enjoyed the work much
>>> more not having to deal with the usual customers.
>>>
>>
>> Same here, in the early 80's I began to refuse fixing TVs and stuff.
>> But even before that, I remember the flyback transformers for some
>> sets being so outrageously expensive that a repair plain didn't make
>> sense. Especially if it had taken out the H-deflection tube and some
>> other stuff with it or the set itself had already been quite tired at
>> the time it hissed its good-bye. This was in Europe.
>>
> I once fixed my parents tv by replacing the yoke, and I more recently
> fixed my wife's tv set by replacing the flyback (AND the horizontal
> output transistor). The first set was a tube type Zenith B&W 19"
> portable. The second was a Trinitron color portable.
> I think you still can get replacement yokes, flybacks, and even CRT's
> for recent tv's. Good luck getting anything else!

I think the real challenge will come when one of those monstrous LCD TV
sets goes on the fritz and it's anything other than the backlight
inverter that died.

--
73, Joerg

361. Re: Was my father's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-28 17:00:52 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <XDszl.21736$b9.2541@bignews6.bellsouth.net>
Source record: 3014

```
Joerg wrote:
> ken scharf wrote:
>> Joerg wrote:
>>> JIMMIE wrote:
>>>> On Mar 21, 5:11 pm, Joerg <notthisjoerg...@removethispacbell.net>
>>>> wrote:
>>>>> JIMMIE wrote:
>>>>>> On Mar 20, 6:47 pm, ken scharf <wa2mzeNOSPAMB...@bellsouth.net>
>>>>>> wrote:
>>>>>>> JIMMIE wrote:
>>>>>>>> On Mar 18, 9:24 pm, Robert casey <wa2...@ix.netcom.com> wrote:
>>>>>>>>> The design used plug-in coils for the osc and rf stages, and
>>>>>>>> they were double conversion designs, with a first IF of
>>>>>>>> 1600 kc and a second IF of either 100 kc or 85 kc (when
>>>>>>>> using surplus ARC-5 IFTs.) The 1800 mc xtal you bought
>>>>>>>> your dad was used for the second coversion osc. to convert
>>>>>>>> the 1600 kc IF down to 100 kc. Many hams deviated from
>>>>>>>> the exact original IF frequencies (i.e. strong local BC
>>>>>>>> station on 1600 kc) which might explain why the xtal
>>>>>>>>> was chosen for 1800 kc instead of 1500 or 1700.
>>>>>>>> We have a local mid power station at 1600KHz, WWRL, at my
>>>>>>>> parents' house,
>>>>>>>> so my father might have wanted to avoid problems with it.
>>>>>>>> His radio had a bandswitch instead of plug in coils, and he'd
>>>>>>>> receive
>>>>>>>> various broadcast SW stations. He wasn't a ham at the time
>>>>>>>> just yet.
>>>>>>>> I had a friend who was a retired engineer with GE turned TV tech
>>>>>>>> who
>>>>>>>> built
>>>>>>>> one with a band switch and he later modified it to
>>>>>>>> be more of a general purpose SW receiver. His name was Olin Griggs.
>>>>>>>> Jimmie.
>>>>>>> I once saw an article in 73 magazine showing a HB receiver that
>>>>>>> used a
>>>>>>> re-worked turret tv tuner as a band switch. The coils were re-wound
>>>>>>> onto the original forms, but some have just replaced the forms
>>>>>>> with some
>>>>>>> of the smaller sized toroid cores. I have a bunch of old tv
>>>>>>> tuners in
>>>>>>> the junk box, but over the years the contacts have gone bad and
>>>>>>> now show
>>>>>>> a high resistance. Maybe they could be cleaned up, but it no
>>>>>>> longer
```

>>>>>>> seems worth the effort. My new idea is to use miniature relays to
>>>>>>> switch the circuits. I recently found nearly a gross of small
>>>>>>> relays
>>>>>>> for free so why not?- Hide quoted text -
>>>>>>> - Show quoted text -
>>>>>> I tried the TV tuner trick one time and it didnt work well at all.
>>>>>> Most tuners are tossed because the contacts fail. ...
>>>>> Not really. Back then TVs were often tossed because the flyback
>>>>> xfmr had
>>>>> blown and repair was deemed uneconomical. Or someone said that because
>>>>> in reality they wanted that brand spanking new set that was one sale.
>>>>>
>>>>> But this is so long ago that if there's any left the contacts will
>>>>> have
>>>>> corrodes away.
>>>>>
>>>>> [...]
>>>>>
>>>>> --
>>>>> 73, Joerg- Hide quoted text -
>>>>>
>>>>> - Show quoted text -
>>>>
>>>> You must be younger than me, Ive replaced a lot of TV tuners and
>>>> flybacks. It was in the early 80s that i first noticed
>>>> TVs becoming diposable and quit working on them. Luckily for me there
>>>> was still a lot of other electtronic repair work needed to be done.
>>>> Most of the local industry was becoming more electronic oriented in
>>>> their equipment and needed someone to maintain their equipment but did
>>>> not want to hire a full time tech. The sawmills, textile plants, food
>>>> processing plants kept me pretty busy aand i enjoyed the work much
>>>> more not having to deal with the usual customers.
>>>>
>>>
>>> Same here, in the early 80's I began to refuse fixing TVs and stuff.
>>> But even before that, I remember the flyback transformers for some
>>> sets being so outrageously expensive that a repair plain didn't make
>>> sense. Especially if it had taken out the H-deflection tube and some
>>> other stuff with it or the set itself had already been quite tired at
>>> the time it hissed its good-bye. This was in Europe.
>>>
>> I once fixed my parents tv by replacing the yoke, and I more recently
>> fixed my wife's tv set by replacing the flyback (AND the horizontal
>> output transistor). The first set was a tube type Zenith B&W 19"
>> portable. The second was a Trinitron color portable.
>> I think you still can get replacement yokes, flybacks, and even CRT's
>> for recent tv's. Good luck getting anything else!
>
>
> I think the real challenge will come when one of those monstrous LCD TV

> sets goes on the fritz and it's anything other than the backlight
> inverter that died.
>
The backlight itself is actually part of the LCD panel in most cases,
so when that dies, you need to replace the panel, which means the tv is
toast.

Most of the other parts are low power, except for the panel drivers,
which themselves may be part of the panel!

362. Re: Was my father's homebrew double conversion SW receiver a HBR?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-28 17:18:23 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <IZszI.21775$YU2.15438@nlpi066.nbdc.sbc.com>
Source record: 3015

ken scharf wrote:
> Joerg wrote:
>> ken scharf wrote:
>>> Joerg wrote:
>>>> JIMMIE wrote:
>>>>> On Mar 21, 5:11 pm, Joerg <notthisjoerg...@removethispacbell.net>
>>>>> wrote:
>>>>>> JIMMIE wrote:
>>>>>>> On Mar 20, 6:47 pm, ken scharf <wa2mzeNOSPAMB...@bellsouth.net>
>>>>>>> wrote:
>>>>>>>> JIMMIE wrote:
>>>>>>>>> On Mar 18, 9:24 pm, Robert casey <wa2...@ix.netcom.com> wrote:
>>>>>>>>>> The design used plug-in coils for the osc and rf stages, and
>>>>>>>>>> they were double conversion designs, with a first IF of
>>>>>>>>>> 1600 kc and a second IF of either 100 kc or 85 kc (when
>>>>>>>>>> using surplus ARC-5 IFTs.) The 1800 mc xtal you bought
>>>>>>>>>> your dad was used for the second coversion osc. to convert
>>>>>>>>>> the 1600 kc IF down to 100 kc. Many hams deviated from
>>>>>>>>>> the exact original IF frequencies (i.e. strong local BC
>>>>>>>>>> station on 1600 kc) which might explain why the xtal
>>>>>>>>>> was chosen for 1800 kc instead of 1500 or 1700.
>>>>>>>>> We have a local mid power station at 1600KHz, WWRL, at my
>>>>>>>>> parents' house,
>>>>>>>>> so my father might have wanted to avoid problems with it.
>>>>>>>>> His radio had a bandswitch instead of plug in coils, and he'd
>>>>>>>>> receive
>>>>>>>>> various broadcast SW stations. He wasn't a ham at the time
>>>>>>>>> just yet.
>>>>>>>>> I had a friend who was a retired engineer with GE turned TV
>>>>>>>>> tech who
>>>>>>>>> built
>>>>>>>>> one with a band switch and he later modified it to
>>>>>>>>> be more of a general purpose SW receiver. His name was Olin
>>>>>>>>> Griggs.
>>>>>>>>> Jimmie.
>>>>>>>> I once saw an article in 73 magazine showing a HB receiver that
>>>>>>>> used a
>>>>>>>> re-worked turret tv tuner as a band switch. The coils were
>>>>>>>> re-wound
>>>>>>>> onto the original forms, but some have just replaced the forms
>>>>>>>> with some
>>>>>>>> of the smaller sized toroid cores. I have a bunch of old tv
>>>>>>>> tuners in
>>>>>>>> the junk box, but over the years the contacts have gone bad and

>>>>>>>> now show
>>>>>>>> a high resistance. Maybe they could be cleaned up, but it no
>>>>>>>> longer
>>>>>>>> seems worth the effort. My new idea is to use miniature relays to
>>>>>>>> switch the circuits. I recently found nearly a gross of small
>>>>>>>> relays
>>>>>>>> for free so why not?- Hide quoted text -
>>>>>>>> - Show quoted text -
>>>>>>> I tried the TV tuner trick one time and it didnt work well at all.
>>>>>>> Most tuners are tossed because the contacts fail. ...
>>>>>> Not really. Back then TVs were often tossed because the flyback
>>>>>> xfmr had
>>>>>> blown and repair was deemed uneconomical. Or someone said that
>>>>>> because
>>>>>> in reality they wanted that brand spanking new set that was one sale.
>>>>>>
>>>>>> But this is so long ago that if there's any left the contacts will
>>>>>> have
>>>>>> corrodes away.
>>>>>>
>>>>>> [...]
>>>>>>
>>>>>> --
>>>>>> 73, Joerg- Hide quoted text -
>>>>>>
>>>>>> - Show quoted text -
>>>>>
>>>>> You must be younger than me, Ive replaced a lot of TV tuners and
>>>>> flybacks. It was in the early 80s that i first noticed
>>>>> TVs becoming diposable and quit working on them. Luckily for me there
>>>>> was still a lot of other electtronic repair work needed to be done.
>>>>> Most of the local industry was becoming more electronic oriented in
>>>>> their equipment and needed someone to maintain their equipment but did
>>>>> not want to hire a full time tech. The sawmills, textile plants, food
>>>>> processing plants kept me pretty busy aand i enjoyed the work much
>>>>> more not having to deal with the usual customers.
>>>>>
>>>>
>>>> Same here, in the early 80's I began to refuse fixing TVs and stuff.
>>>> But even before that, I remember the flyback transformers for some
>>>> sets being so outrageously expensive that a repair plain didn't make
>>>> sense. Especially if it had taken out the H-deflection tube and some
>>>> other stuff with it or the set itself had already been quite tired
>>>> at the time it hissed its good-bye. This was in Europe.
>>>>
>>> I once fixed my parents tv by replacing the yoke, and I more recently
>>> fixed my wife's tv set by replacing the flyback (AND the horizontal
>>> output transistor). The first set was a tube type Zenith B&W 19"
>>> portable. The second was a Trinitron color portable.
>>> I think you still can get replacement yokes, flybacks, and even CRT's

>>> for recent tv's. Good luck getting anything else!
>>
>>
>> I think the real challenge will come when one of those monstrous LCD
>> TV sets goes on the fritz and it's anything other than the backlight
>> inverter that died.
>>
> The backlight itself is actually part of the LCD panel in most cases,
> so when that dies, you need to replace the panel, which means the tv is
> toast.
>

Often you can get to that inverter. Then if you are lucky it's the two
transistors. If not it's usually the transformer and then the catalog
chase begins.

> Most of the other parts are low power, except for the panel drivers,
> which themselves may be part of the panel!

Got to be careful. I've designed a HV generator with CCFL transformers
for a client last year. Guess who was the first one it bit?

The remainder of those TVs is often largely high integration. DSPs,
special video chips, memory, FPGA, ASICs. Very hard to debug because
they won't give you any technical documents, usually.

--
73, Joerg

363. Re: Boys Book Of Radio And Electronics - Destroyed!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-28 20:36:42 UTC
From: RadioGuy <nospam@nospam.com>
Message-ID: <uTvzl.87505$4m1.30306@bgtnsc05-news.ops.worldnet.att.net>
Source record: 3016

"Bill M" <radioexray@geemail.com> wrote in message
news:gqjdn601lsv@news4.newsguy.com...
> http://www.snopes.com/inboxer/pending/cpsia.asp

Good link and the references were appreciated though the discussion was a bit confusing.

So in other words to all those that have suspect items; err on the safe side and discard them safely so as to avoid any possible infractions and liabilities.

364. Re: 6M amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-29 00:19:01 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <8373ffee-7372-4bb8-89d2-eebf872d3931@z9g2000yqi.googlegroups.com>
Source record: 3017

On Mar 28, 11:45 am, ken scharf <wa2mzeNOSPAMB...@bellsouth.net>
wrote:
> JIMMIE wrote:
> > On Mar 22, 4:25 pm, "Unca Pete" <radioconnect...@cox.net> wrote:
> >> I'd think an old Ohmmite Z-50 would be ideal. Wonder
> >> what the value in uH was?
>
> >> Pete
>
> > I thought about a Z-50. I have one I use on a 6 Meter amp using a pair
> > of 6146Bs. I didnt know if it would work with the 4cx250s or not.
>
> > 6.8 uh rings a bell but Im not sure.
>
> > Id rather wind my own if it will keep me from having to pull out the
> > credit card and pay more shipping than what the thing cost.
>
> > Jimme
>
> Any choke that is not self resonant at 50MHz and has enough inductance
> to give an impedance at least 10 times the plate load resistance will
> work. It, of course, must be able to handle the required voltage and
> current. The form can be ceramic, Teflon, or any material that does not
> absorb RF at 50 MHz. An air wound choke will work too, but would have to
> be wound with thick enough wire to be self supporting, and it might be
> hard to meet the other requirements with this type of construction.- Hide quoted text -
>
> - Show quoted text -

OK I made a coil per the instructions I mentioned and placed it in
parallell with a 50 ohm resistor and connected it to my antenna
analyzer. There is a big spike in the SWR at about 75 Mhz. I assume
this is the self resonant frequency of the coil. Is this far enough
away from 50Mhz to use as a plate choke?

365. Re: 6M amp

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-29 13:44:46 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <jQKzl.22146$v8.18890@bignews3.bellsouth.net>
Source record: 3018

JIMMIE wrote:
> On Mar 28, 11:45 am, ken scharf <wa2mzeNOSPAMB...@bellsouth.net>
> wrote:
>> JIMMIE wrote:
>>> On Mar 22, 4:25 pm, "Unca Pete" <radioconnect...@cox.net> wrote:
>>>> I'd think an old Ohmmite Z-50 would be ideal. Wonder
>>>> what the value in uH was?
>>>> Pete
>>> I thought about a Z-50. I have one I use on a 6 Meter amp using a pair
>>> of 6146Bs. I didnt know if it would work with the 4cx250s or not.
>>> 6.8 uh rings a bell but Im not sure.
>>> Id rather wind my own if it will keep me from having to pull out the
>>> credit card and pay more shipping than what the thing cost.
>>> Jimme
>> Any choke that is not self resonant at 50MHz and has enough inductance
>> to give an impedance at least 10 times the plate load resistance will
>> work. It, of course, must be able to handle the required voltage and
>> current. The form can be ceramic, Teflon, or any material that does not
>> absorb RF at 50 MHz. An air wound choke will work too, but would have to
>> be wound with thick enough wire to be self supporting, and it might be
>> hard to meet the other requirements with this type of construction.- Hide quoted text -
>>
>> - Show quoted text -
>
> OK I made a coil per the instructions I mentioned and placed it in
> parallell with a 50 ohm resistor and connected it to my antenna
> analyzer. There is a big spike in the SWR at about 75 Mhz. I assume
> this is the self resonant frequency of the coil. Is this far enough
> away from 50Mhz to use as a plate choke?
That's half an octave away. Good enough.
I would install the choke in the circuit and without applying power or
drive put a gird dip meter to the choke and double check for resonance
again. IF resonance at 50 mhz is detected, swing the tank capacitors to
make sure you are just detecting resonance in the tank circuit coupled
through the choke. If that is what you see, it's OK.

366. Re: Boys Book Of Radio And Electronics - Destroyed!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-29 15:13:25 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <dbdbfa51-d58e-4558-bf2b-378a7ed442bc@s28g2000vbp.googlegroups.com>
Source record: 3019

On Mar 28, 10:16 am, ken scharf <wa2mzeNOSPAMB...@bellsouth.net>
wrote:
> RadioGuy wrote:
Hey OM:

Sort o reminds me of the FCC ACT of 1934. Where they started stripping
frequencies away from amateurs. Soon we will end up all on a party
line frequency like 10.7 CM along with the solar flux, what the flux?

73 OM
de n8zu

> > Childrens books (including Alfred Morgan's) before 1985 are being destroyed
> > due to lead content in the ink as per Consumer Product Safety Commission
> > ruling.
>
> > Please review article:http://www.city-journal.org/2009/eon0212wo.html
>
> > RG
>
> The lead content in ink would be very low, and only could poison you if
> you ATE the book. Any child who would read one of the Morgan books
> would be old enough to no longer be chewing on books.
>
> Of course such books shouldn't be thrown in landfill (and burning them
> would be bad too as it would release the lead to the atmosphere!).

367. Re: Boys Book Of Radio And Electronics - Destroyed!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-03-31 20:16:52 UTC
From: dave <dave@dave.dave>
Message-ID: <49d27a38$0$31177$bd467cd0@news.dslextreme.com>
Source record: 3020

RadioGuy wrote:

>
> Perhaps the digitizing of books may be a safe recourse---but who can be
> trusted to make the selections of what to digitize, who will maintain and
> oversee electronic libraries?
>
> RG
>
>
Isn't the whole point of the internet the fact that there are no
gatekeepers?

368. Re: Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-01 03:16:38 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <21a42443-cfc9-4353-ae28-71b13a8f9dce@y13g2000yqn.googlegroups.com>
Source record: 3021

On Mar 27, 12:43 pm, Joerg <notthisjoerg...@removethispacbell.net>
wrote:
> JIMMIE wrote:
> > On Mar 27, 3:59 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> >> On Mar 18, 10:50 pm, RFI-EMI-GUY <Rhyol...@NETTALLY.COM> wrote:
>
> >>> JIMMIE wrote:
> >>>> I have 3 mast mounted nuvistor pre amps less power supplies. I was
> >>>> looking for information on these to convert them to use on the 6 and 2
> >>>> meter and 70cm ham bands. I may still have a power supply around but
> >>>> as of yet I havent been able to find it. The pre amps are mount in a
> >>>> somewhat egg shaped plastic container with twin lead connections on
> >>>> them. Im not sure of the manufacturer. Schematics on the amplifiers
> >>>> and power supplies would be nice. Directions on doing the mod would be
> >>>> great. There are plans for ham band nuvistor preamps around so if I
> >>>> could figure out what I have it shouldnt be that difficult to conver
> >>>> it to what I want. Besides that it will give me something to do with
> >>>> these old 6cw4s.
> >>>> Jimmie
> >>> You would do good to find a 70's or earlier ARRL handbook. There were
> >>> many articles about Nuvistors.
> >>> --
> >>> Joe Leikhim K4SAT
> >>> "The RFI-EMI-GUY"©
> >>> "Use only Genuine Interocitor Parts" Tom Servo ;-P
> >> Well I got a little 2M nuvistor pre-amp put together last night. Im
> >> not sure of the noise figure of the amp but according to my S meter it
> >> must have about at least 20 db of gain, maybe 30.
>
> >> I will have to take it into work were I have the test equipment to
> >> check it out better.
>
> >> Jimmie- Hide quoted text -
>
> >> - Show quoted text -
>
> > Anyone know what kind of noise figure I could expect out of a 6cw4
> > nuvistor preamp. I only saw one reference and it mentioned 3db but
> > mostly all the other references just talked about gain.
>
> From vague memory I think Geloso used them a lot and got a little under
> 4dB out of those on 144MHz. In case anyone needs a datasheet:
>
> http://www.r-type.org/pdfs/6cw4.pdf

>
> --
> 73, Joerg- Hide quoted text -
>
> - Show quoted text -

Thanks, I was just trrying to finish up a project I started years ago, my wife had been getting on to me about not completing what I start. Tinkering with the nuvistors also sounded like fun. Well I now realize why you dont see projects based on them and noone is scouring the tables at the hamfest looking for nuvistors. There are better/easier of ways of skinning this cat. A DC to Daylight preamp using a MMIC may well have better NF and gain.

Jimmie

369. Re: Boys Book Of Radio And Electronics - Destroyed!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-01 03:34:57 UTC
From: joeturn <joeturn2000@yahoo.com>
Message-ID: <84523d98-3086-4284-9150-8811e663e369@f19g2000yqo.googlegroups.com>
Source record: 3022

PHD at work how are we going to keep the wormed?

http://www.columbiamissourian.com/stories/2009/03/19/consumer-product-safety-commission-urges-libraries-take-childrens-books-printed-1986-their-shelves/

370. Re: Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-01 03:37:58 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <skBAl.13296$hc1.350@flpi150.ffdc.sbc.com>
Source record: 3023

JIMMIE wrote:
> On Mar 27, 12:43 pm, Joerg <notthisjoerg...@removethispacbell.net>
> wrote:
>> JIMMIE wrote:
>>> On Mar 27, 3:59 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
>>>> On Mar 18, 10:50 pm, RFI-EMI-GUY <Rhyol...@NETTALLY.COM> wrote:
>>>>> JIMMIE wrote:
>>>>>> I have 3 mast mounted nuvistor pre amps less power supplies. I was
>>>>>> looking for information on these to convert them to use on the 6 and 2
>>>>>> meter and 70cm ham bands. I may still have a power supply around but
>>>>>> as of yet I havent been able to find it. The pre amps are mount in a
>>>>>> somewhat egg shaped plastic container with twin lead connections on
>>>>>> them. Im not sure of the manufacturer. Schematics on the amplifiers
>>>>>> and power supplies would be nice. Directions on doing the mod would be
>>>>>> great. There are plans for ham band nuvistor preamps around so if I
>>>>>> could figure out what I have it shouldnt be that difficult to conver
>>>>>> it to what I want. Besides that it will give me something to do with
>>>>>> these old 6cw4s.
>>>>>> Jimmie
>>>>> You would do good to find a 70's or earlier ARRL handbook. There were
>>>>> many articles about Nuvistors.
>>>>> --
>>>>> Joe Leikhim K4SAT
>>>>> "The RFI-EMI-GUY"ï¿½
>>>>> "Use only Genuine Interocitor Parts" Tom Servo ;-P
>>>> Well I got a little 2M nuvistor pre-amp put together last night. Im
>>>> not sure of the noise figure of the amp but according to my S meter it
>>>> must have about at least 20 db of gain, maybe 30.
>>>> I will have to take it into work were I have the test equipment to
>>>> check it out better.
>>>> Jimmie- Hide quoted text -
>>>> - Show quoted text -
>>> Anyone know what kind of noise figure I could expect out of a 6cw4
>>> nuvistor preamp. I only saw one reference and it mentioned 3db but
>>> mostly all the other references just talked about gain.
>> From vague memory I think Geloso used them a lot and got a little under
>> 4dB out of those on 144MHz. In case anyone needs a datasheet:
>>
>> http://www.r-type.org/pdfs/6cw4.pdf
>>
>> --
>> 73, Joerg- Hide quoted text -
>>
>> - Show quoted text -

>
> Thanks, I was just trrying to finish up a project I started years ago,
> my wife had been getting on to me about not completing what I start.

Somehow this sounds quite familiar :-)

> Tinkering with the nuvistors also sounded like fun. Well I now realize
> why you dont see projects based on them and noone is scouring the
> tables at the hamfest looking for nuvistors. There are better/easier
> of ways of skinning this cat. A DC to Daylight preamp using a MMIC
> may well have better NF and gain.
>

True, but tubes and even those tiny ones do have one distinct advantage.
When a thunderstorm rolls through town or you accidentally transmit into
your pre-amp their chance of survival is orders of magnitude higher.
Just imagine, when placing a hard 50V spike onto the grid a tube won't
even flinch. A GaAs-FET or MMIC? Tsssk ... *BANG*.

I realized this early on after getting my license. The transistor in the
pre-amp on the roof had died for the umpteenth time during a
thunderstorm. But this time the moss on the roof was quite thick and I
almost slid down. Whew! That did it. Built one with a tube (army
surplus, NOS, long lifetime version), and it never died again. Oh yeah,
and more than once did I accidentally transmit into the back of it. Left
it completely unfazed. Losing a dB or two in noise figure for the sake
of not having to scale that roof was well worth it :-)

I have seen Russians offer cartons full of nuvistors on auction sites,
they almost look like bonbon boxes. They must have a sizeable stash of
those over there.

--
73, Joerg

371. Re: Boys Book Of Radio And Electronics - Destroyed!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-01 03:52:21 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <eyBAl.17241$as4.2888@nlpi069.nbdc.sbc.com>
Source record: 3024

joeturn wrote:
> PHD at work how are we going to keep the wormed?
>
> http://www.columbiamissourian.com/stories/2009/03/19/consumer-product-safety-commission-urges-libraries-take-childrens-books-printed-1986-their-shelves/

Quote "If that child were to actually start mouthing the book ..."

What has society come to? Where's the parents? In my youth parents or grandparents would read to the children. Leaving a very small child alone with a book would have been considered rather daft.

Maybe the next ARRL Handbook will contain a bold warning "Do not put in mouth" in English, Spanish and Klingon ;-)

--
73, Joerg

372. Re: Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-01 06:05:49 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <s7v5t4letkghfhlljqq5gqgfpqshijn900@4ax.com>
Source record: 3025

On Tue, 31 Mar 2009 20:37:58 -0700, Joerg
<notthisjoergsch@removethispacbell.net> wrote:

>JIMMIE wrote:
>> On Mar 27, 12:43 pm, Joerg <notthisjoerg...@removethispacbell.net>
>> wrote:

>>> From vague memory I think Geloso used them a lot and got a little under
>>> 4dB out of those on 144MHz. In case anyone needs a datasheet:
>>>
>>> http://www.r-type.org/pdfs/6cw4.pdf

According to this page
http://www.amsat.org/amsat/archive/amsat-bb/200409/msg00451.html
Geloso got 3.6 dB@50/144 MHz to 6.0 dB@432 MHz.

The VHF numbers are still usable at terrestrial VHF communication due
to the high band noise. For satellite and EME communication, the
performance it not very good at VHF and practically useless on UHF.

>> Tinkering with the nuvistors also sounded like fun. Well I now realize
>> why you dont see projects based on them and noone is scouring the
>> tables at the hamfest looking for nuvistors. There are better/easier
>> of ways of skinning this cat. A DC to Daylight preamp using a MMIC
>> may well have better NF and gain.
>>
>
>True, but tubes and even those tiny ones do have one distinct advantage.
>When a thunderstorm rolls through town or you accidentally transmit into
>your pre-amp their chance of survival is orders of magnitude higher.
>Just imagine, when placing a hard 50V spike onto the grid a tube won't
>even flinch. A GaAs-FET or MMIC? Tsssk ... *BANG*.

Most part of the lightning electromagnetic radiation is at quite low
frequencies (below 1 MHz) and a typical VHF/UHF antenna will have a
quite low effective height at such low frequencies, thus not much low
frequency energy should enter the preamp.

However, during thunderstorms, quite large static charges can be
accumulated in ungrounded antenna elements and if there is a DC path
to the transistor, there is a significant risk of damage.

Using a folded dipole and grounding the center point will reduce the
static build up. The folded dipole will also act as a very small
magnetic loop, reducing the LF pickup of the lightning EM pulse. A
strong DC path (such as a shorted 1/4 wavelength stub) from the
amplifier input to ground will also reduce the DC and low frequency

pickup, thus reducing the risk for dangerously large voltages at the transistor base/gate.

Paul OH3LWR

373. Re: Radio books

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-01 10:36:54 UTC
From: Theo <theodore.twyler@ntlworld.com>
Message-ID: <gtHAI.180583$li4.139927@newsfe19.ams2>
Source record: 3026

"JIMMIE" <JIMMIEDEE123@YAHOO.COM> wrote in message
news:149d9b88-500e-4a6e-b83a-a14110d93d8f@q16g2000yqg.googlegroups.com...
>I am trying to remember the name of a radio book that was stolen from
> me years ago. It was a simple entry level book that had construction
> projects. It featured a series of valve transmitter each a little more
> complex and powerful than the next. A 1 valve 2 valve and a 3 valve tx
> that would put out 75 watts and used an 829B in the final in a push-
> pull configuration. It wasnt a large book and I remember the cover was
> black. Also stolen was a science project book that showed how to build
> cloud chambers, your own x- ray machine and a particle accelerator. I
> built the xray machiine and most of a siesmograph. I had put the
> siesmograph project on hold because I couldnt find some of the key
> parts.
>
> Jimmie

I remember a book from my youth which sounds like the one you may be
thinking of , it was called something like "The Scientific American Book of
Projects and Experiments"

Theo

374. Re: Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-01 16:26:33 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <1BMAI.17261$as4.11861@nlpi069.nbdc.sbc.com>
Source record: 3027

Paul Keinanen wrote:
> On Tue, 31 Mar 2009 20:37:58 -0700, Joerg
> <notthisjoergsch@removethispacbell.net> wrote:
>
>> JIMMIE wrote:
>>> On Mar 27, 12:43 pm, Joerg <notthisjoerg...@removethispacbell.net>
>>> wrote:
>
>>>> From vague memory I think Geloso used them a lot and got a little under
>>>> 4dB out of those on 144MHz. In case anyone needs a datasheet:
>>>>
>>>> http://www.r-type.org/pdfs/6cw4.pdf
>
> According to this page
> http://www.amsat.org/amsat/archive/amsat-bb/200409/msg00451.html
> Geloso got 3.6 dB@50/144 MHz to 6.0 dB@432 MHz.
>
> The VHF numbers are still usable at terrestrial VHF communication due
> to the high band noise. For satellite and EME communication, the
> performance it not very good at VHF and practically useless on UHF.
>

Although back in those days UHF was reserved for the more well-heeled
hams. I thought the 2m performance that old John got out of the
nuvistors was pretty good.

>
>>> Tinkering with the nuvistors also sounded like fun. Well I now realize
>>> why you dont see projects based on them and noone is scouring the
>>> tables at the hamfest looking for nuvistors. There are better/easier
>>> of ways of skinning this cat. A DC to Daylight preamp using a MMIC
>>> may well have better NF and gain.
>>>
>> True, but tubes and even those tiny ones do have one distinct advantage.
>> When a thunderstorm rolls through town or you accidentally transmit into
>> your pre-amp their chance of survival is orders of magnitude higher.
>> Just imagine, when placing a hard 50V spike onto the grid a tube won't
>> even flinch. A GaAs-FET or MMIC? Tsssk ... *BANG*.
>
> Most part of the lightning electromagnetic radiation is at quite low
> frequencies (below 1 MHz) and a typical VHF/UHF antenna will have a
> quite low effective height at such low frequencies, thus not much low
> frequency energy should enter the preamp.
>
> However, during thunderstorms, quite large static charges can be

> accumulated in ungrounded antenna elements and if there is a DC path
> to the transistor, there is a significant risk of damage.
>
> Using a folded dipole and grounding the center point will reduce the
> static build up. The folded dipole will also act as a very small
> magnetic loop, reducing the LF pickup of the lightning EM pulse. A
> strong DC path (such as a shorted 1/4 wavelength stub) from the
> amplifier input to ground will also reduce the DC and low frequency
> pickup, thus reducing the risk for dangerously large voltages at the
> transistor base/gate.
>

The trouble in my case was that this thing was also used for the upper shortwave bands, when doing duplex transmissions. Similar to what is nowadays called an active antenna. I didn't have the space for a 2nd large antenna, the first one was already quite a stretch. This was in Germany where properties are quite tiny.

--
73, Joerg

375. Silenced Hams Mean Safer County

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-01 17:59:08 UTC
From: News Features <news@lanews.com>
Message-ID: <JXNAl.23466$Ws1.4318@nlpi064.nbdc.sbc.com>
Source record: 3028
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

SILENCED HAMS MEAN SAFER COUNTY

-from the Los Angeles Press-Telegram (4/1/2009)

San Luis Obispo county supervisors took drastic and unprecedented action yesterday by passing an ordinance that would prohibit amateur radio operators, known as "hams", from operating their transmitting stations. The measure was put in place to eliminate what officials said were health risks associated with transmitters located close to children. A legal struggle is expected.

By a vote of 4 to 1 with one abstention, the governing board of SLO county took action aimed at addressing a recent Stanford University study that showed a correlation between ham radios and attention deficit disorder and hyperactivity in children, as well as nagging reports of interference caused by radio hams operating their high-powered transmitters in residential neighborhoods.

"Our primary responsibility is to provide a safe environment for children to live without the dangerous effects of radio waves constantly bombarding them and causing proven neurological and psychological problems," said E. Duane Nyborg, an attorney who represented the county in several court cases in the past year. "Hams are not the only culprits, but they are usually in very close proximity to children and are no doubt a major contributor to the health problems we've been seeing. The interference is just the last straw that convinced the county that something had to be done about it."

Atascadero city manager Laura Lopez said that she has seen a tenfold increase in the number of complaints of interference from ham radio operators in the last six months. New housing developments which have dramatically increased the population there and placed homes unusually close to each other are the predominant contributing factor. Similar conditions exist in most of the county.

"We have radio hams getting into toasters, electric pianos, light bulbs, everything, from their powerful transmitters that cause all this static. Many of our citizens can't use basic appliances or watch television because of all the junk that the hams are broadcasting," she told the Press-Telegram by telephone.

Hams can't say they didn't see this coming. They were warned by the county last year that if they did not submit to a check of their stations by officials, they would have limits imposed on their operation. Few consented to the searches, which most decried as invasive. But nobody expected a total ban on transmissions.

"This is outrageous. You'd better believe we're going to fight back and win. This is a totalitarian seizure of our rights that is totally illegal and can't stand up," said Frank Wilson, a local ham club president. He said there were no formal plans for an appeal yet but preparations were underway.

Wilson claims that a federal preemption of local zoning ordinances, called PRB-1, delineates three rules for local municipalities to follow in accomodating antenna structures such as are used by hams. But Nyborg says that PRB-1 applies to antenna structures only, and not the transmitters used to feed the antennas with a radio signal. "We know all about PRB-1. That's why we said nothing about antennas. This law is not about antennas. It goes after the root of the problem, which is the transmitters that put out huge signals that get into the brains of our children and short-circuit them out. Those are the facts, that's what the scientific evidence points to," he said at a news conference called shortly after the county's action.

In 2008, a group of researchers in the school of Environmental Health and Safety at Stanford published their findings that exposure to ham radio signals for three hours per day increased the risk of hyperactivity and related disorders by 10% in children aged 12 and under. This effect was seen when a typical ham radio was turned on up to ⅛ mile away. The San Luis Obispo city office says that up to 11,000 children in that city live that close to a ham radio station.

The Stanford study showed that frequencies around 3.5, 7, and 14 Megahertz were the most harmful, but that the danger existed all the way up to 450 Megahertz and above.

"We know where the hams are, that information is easy to get on the Internet," said former mayor of Paso Robles and current county supervisor Anthony Wu. "Most of these guys are running one hundred watts of power, that's an incredible amount of radiation, and you can't block it out. It enters your house, it gets into your body and does a lot of damage there."

Cindy MacMahon, 41, of Morro Bay, soccer mom of two and volunteer at city bake sales, praised the action by the board of supervisors and looked forward to radio-free days ahead. "I'm always getting interference on my TV and stereo that I'm sure is from the guy down the street with his big tower. I don't know why they even allow those big, ugly things. I know that my kids are harder to control when he turns that thing on and I've been saying that for three years."

Most area hams were totally unaware of the new law and Wilson believes there will be a revolt when they discover it. "I will be speaking about it at our club meeting on Friday. We would normally disseminate the information by radio, but of course that's illegal for the moment."

Amateur radio operator Clay Collins of Pismo Beach, was incredulous. "We provide free emergency communications for the county, we assist the police department, we help out several times a year on all manner of public events, and this is the thanks we get. Someone is badly informed. Next thing you know, we'll be accused of being responsible for global warming." Another radio ham who identified himself only as "Deke" said that although a number

of hams were mobilizing to do what they could he was pessimistic. "I actually know that Nyborg guy. He walks around twelve hours a day with a cell phone up to his head and yet he's worried about the tiny amount of radiation from my transmitter." Deke claims that the frequencies of a cell phone are close to that of a microwave oven. "You hold a [cell] phone up to your head, you're cooking your brain slowly," he warned.

Collins, a ham of fifty-three years and grandfather of six, lives in a housing tract with a homeowners' association that already regulates ham radio operators. He says that restrictive HOA agreements exacerbate the problem. "By prohibiting high antenna towers, [the HOA rules] force me to place my antennas lower and closer to my neighbors, and force me to use higher power to make up for the difference in performance." He said that his antenna, which is located in his attic, creates far more radiation on the ground than if it were up on a 50-foot tower-the same type of tower Collins applied for in 1997 but was denied a permit for. Hams are required by the FCC to keep track of the amount of radiation from their antennas but Collins' station is far below the allowable limits, he says. "In the next earthquake, all of my neighbors will be running to my house to send messages out to their loved ones in other places. I hope they remember this."

Dick Henley, a member of the Electronic Industries Association who lives in Ann Arbor, Michigan, claims that most of the interference to appliances, televisions, and phones can't be blamed on hams going about their normal activity. "The vast majority of these appliances is insufficiently shielded against external fields. The slightest interference- even from a garage door opener or a cell phone-can disrupt it. In most cases, it's not the ham's fault." He said that on the contrary, hams are usually the ones who must suffer with interference from these electronic devices. "Most of the stuff coming out of China spews interference to radios, but the hams have just learned to live with it. Homeowners are totally oblivious to this," he said.

Xiang Qang, the principal investigator at Stanford who co-published the original paper, explained that the radio waves, over the long term, polarize cells in the brain tissue and bias a child toward rough or anti-social behavior. "We saw these children who couldn't sit still, couldn't listen to a book being read to them, and who had severe reading delays and disabilities. We started to see that each time a television was turned on near them, they would actually exhibit worse behavior. So we followed that path: why the television? Why the television? Then we discovered that is wasn't the television, but the radiation from it. So we tested many other types of transmitters and found that the worst ones were ham transmitters from Icom and Yaesu, with the Kenwoods being marginally better."

Qang explains that it is the brain's frontal lobe which is most vulnerable to external radiation due to its location at the front of the cranium just behind the forehead, its proximity to the sphenoid wing- the bone at the temple that houses the pituitary gland- and it's large size. "The frontal lobe absorbs a lot of radiation and since it governs our behavior, this is why we think that attention deficit and hyperactivity are the symptoms of prolonged absorption of high-frequency waves in that region," she said.

"Nonsense," says Dr. V. Subrahaminayalakshminirayana, head of neurology at Kaiser Permanente in San Francisco. "There is absolutely no conclusive evidence in the literature to support an ambitious and imaginative theory that ionizing radiation can deleteriously and negatively affect behavior in children whether the exposure is at a relatively constant low-level or periodic." He believes that attention deficit hyperactivity is more likely a function of exhaustive over-stimulation of the brain by video games, texting, and television viewing. "Ask the Asian parents of your child's playmate why they never seem to have this problem," he laughed.

In fact, the Stanford study found that Hispanic children were fourteen times as likely to suffer the effects of radio waves than were Asian children. Hydra Brock-Parker, dean of sociology at Cal Poly San Luis Obispo and a consultant named in the Stanford study, says that Hispanics live in depressed parts of a city where houses and apartments are packed closer together and the possibility of exposure is much greater. "Where are all of those children going to go to escape radiation from transmitters? There's no backyard to play in and besides, you wouldn't want your children playing outside in those neighborhoods. If you've got, you know, a ham serial-killer type next door flooding your apartment with high-intensity radio waves, you have no choice but to sit there and get sick," she said.

Representatives from Marin, Ventura, and Los Angeles counties were present at the press conference and were said to be keenly interested in the implementation of the new law. A similar measure was introduced into the L.A. County Board's docket on Monday and may be considered at the next session in May.

376. Re: Silenced Hams Mean Safer County

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-01 18:27:44 UTC
From: Reinhard Zwirner <reinhard_zwirner@web.de>
Message-ID: <49D3B220.B5A9E29A@t-online.de>
Source record: 3029
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

News Features schrieb:
>
> SILENCED HAMS MEAN SAFER COUNTY

I do really hope that this article is related to today's date ...

Reinhard

377. Re: Silenced Hams Mean Safer County

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-01 22:25:20 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <gr0pkhome2@news.jpl.nasa.gov>
Source record: 3030
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Reinhard Zwirner wrote:
> News Features schrieb:
>> SILENCED HAMS MEAN SAFER COUNTY
>
> I do really hope that this article is related to today's date ...
>
> Reinhard
Google "Los Angeles Press-Telegram", the purported source..

378. Re: Silenced Hams Mean Safer County

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-02 18:53:48 UTC
From: JB <nospam@goofball.net>
Message-ID: <0R7Bl.1196$6n.319@nwrddc01.gnilink.net>
Source record: 3031
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

lanews.com is a fake spam site

So how do you keep April fools jokes from being picked up by wackos that quote it as gospel and try to institute illegal measures in their own jurisdiction to drag people down by forcing them to defend themselves at great cost or default, like they tried to do in Lancaster.

Quit picking on ham radio.

Instead, lets tell the one where the leader decides a small but identifiable group is to blame for all the ills of the world and should be outlawed, forced to labor and finally exterminated. Oh wait! That really happened!

"News Features" <news@lanews.com> wrote in message
news:JXNAl.23466$Ws1.4318@nlpi064.nbdc.sbc.com...
> SILENCED HAMS MEAN SAFER COUNTY

379. Re: Silenced Hams Mean Safer County

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-02 22:00:59 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <VMOdndzSkf4BqEjUnZ2dnUVZ_trinZ2d@bright.net>
Source record: 3032
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

News Features wrote:
> SILENCED HAMS MEAN SAFER COUNTY
>
>
>
>
>
> -from the Los Angeles Press-Telegram (4/1/2009)
>
>
>
>
>
> San Luis Obispo county supervisors took drastic and unprecedented action
> yesterday by passing an ordinance that would prohibit amateur radio
> operators, known as "hams", from operating their transmitting stations. The
> measure was put in place to eliminate what officials said were health risks
> associated with transmitters located close to children. A legal struggle is
> expected.
>
>
>
>
>
>
Good thing this came out on APRIL FIRST...

380. Re: Nuvistor TV preamp mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-02 23:23:01 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <7d0b6cc1-23ce-43b2-9454-87df1ac1ff01@p11g2000yqe.googlegroups.com>
Source record: 3033

On Mar 31, 11:16 pm, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> On Mar 27, 12:43 pm, Joerg <notthisjoerg...@removethispacbell.net>
> wrote:
>
>
>
>
>
> > JIMMIE wrote:
> > > On Mar 27, 3:59 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> > >> On Mar 18, 10:50 pm, RFI-EMI-GUY <Rhyol...@NETTALLY.COM> wrote:
>
> > >>> JIMMIE wrote:
> > >>>> I have 3 mast mounted nuvistor pre amps less power supplies. I was
> > >>>> looking for information on these to convert them to use on the 6 and 2
> > >>>> meter and 70cm ham bands. I may still have a power supply around but
> > >>>> as of yet I havent been able to find it. The pre amps are mount in a
> > >>>> somewhat egg shaped plastic container with twin lead connections on
> > >>>> them. Im not sure of the manufacturer. Schematics on the amplifiers
> > >>>> and power supplies would be nice. Directions on doing the mod would be
> > >>>> great. There are plans for ham band nuvistor preamps around so if I
> > >>>> could figure out what I have it shouldnt be that difficult to conver
> > >>>> it to what I want. Besides that it will give me something to do with
> > >>>> these old 6cw4s.
> > >>>> Jimmie
> > >>> You would do good to find a 70's or earlier ARRL handbook. There were
> > >>> many articles about Nuvistors.
> > >>> --
> > >>> Joe Leikhim K4SAT
> > >>> "The RFI-EMI-GUY"©
> > >>> "Use only Genuine Interocitor Parts" Tom Servo ;-P
> > >> Well I got a little 2M nuvistor pre-amp put together last night. Im
> > >> not sure of the noise figure of the amp but according to my S meter it
> > >> must have about at least 20 db of gain, maybe 30.
>
> > >> I will have to take it into work were I have the test equipment to
> > >> check it out better.
>
> > >> Jimmie- Hide quoted text -
>
> > >> - Show quoted text -
>
> > > Anyone know what kind of noise figure I could expect out of a 6cw4
> > > nuvistor preamp. I only saw one reference and it mentioned 3db but

> > > mostly all the other references just talked about gain.
>
> > From vague memory I think Geloso used them a lot and got a little under
> > 4dB out of those on 144MHz. In case anyone needs a datasheet:
>
> >http://www.r-type.org/pdfs/6cw4.pdf
>
> > --
> > 73, Joerg- Hide quoted text -
>
> > - Show quoted text -
>
> Thanks, I was just trrying to finish up a project I started years ago,
> my wife had been getting on to me about not completing what I start.
> Tinkering with the nuvistors also sounded like fun. Well I now realize
> why you dont see projects based on them and noone is scouring the
> tables at the hamfest looking for nuvistors. There are better/easier
> of ways of skinning this cat. A DC to Daylight preamp using a MMIC
> may well have better NF and gain.
>
> Jimmie- Hide quoted text -
>
> - Show quoted text -

OH, what the heck,Since I got the preamp stage built I might as well
build a 2M to 10M rx converter.

Jimmie

381. Re: Silenced Hams Mean Safer County

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-03 12:43:22 UTC
From: stan <tsanford@nf.sympatico.ca>
Message-ID: <cc0486b7-fe6a-4950-97cd-6945d1c2efae@n33g2000vba.googlegroups.com>
Source record: 3034
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Apr 2, 7:00 pm, Scott <acepilotREM...@bloomer.net> wrote:
> News Features wrote:
> > SILENCED HAMS MEAN SAFER COUNTY
>
> > -from the Los Angeles Press-Telegram (4/1/2009)
>
> > San Luis Obispo county supervisors took drastic and unprecedented action
> > yesterday by passing an ordinance that would prohibit amateur radio
> > operators, known as "hams", from operating their transmitting stations. The
> > measure was put in place to eliminate what officials said were health risks
> > associated with transmitters located close to children. A legal struggle is
> > expected.
>
> Good thing this came out on APRIL FIRST...- Hide quoted text -
>
> - Show quoted text -

Reminds one of an outburst of complaints about interferenec to to TV
from one UK radio amateur station back in the 1950s.
While Britain had some TV back in 1937 the 1950s saw a fast growing
increase in domestic TV set ownership; quickly nicknamed 'The Telly'.
The interference complaints bubble burst rather rapidly when it turned
out the amateur in question, ad all his family, had been away from
home for the entire period of the complaints!

382. nixie driver

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-03 14:34:16 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <83cd6cb3-043d-4bf3-ac92-4dd429e7a7bc@q9g2000yqc.googlegroups.com>
Source record: 3035

I have a Systron Donner frequency counter that uses Nixie tubes. The counter works fine but I am forever replacing the Nixie drivers 74141s. I started to use it this AM an one was out. Is there a replacement for the 74141, I couldnt find one, or is there a circuit I could build on a DIP header to replace them. I could probably design one but I wanted something tried an tested as I dont want to put my counter board at more risk than I have to.

Jimmie

383. Re: nixie driver

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-03 16:06:09 UTC
From: "Bruce W. Ellis" <ellis@means.net>
Message-ID: <dpcct4ll7oq0nul287n92edue7b0r3d61q@4ax.com>
Source record: 3036

On Fri, 3 Apr 2009 07:34:16 -0700 (PDT), JIMMIE
<JIMMIEDEE123@YAHOO.COM> wrote:

>I have a Systron Donner frequency counter that uses Nixie tubes. The
>counter works fine but I am forever replacing the Nixie drivers
>74141s. I started to use it this AM an one was out. Is there a
>replacement for the 74141, I couldnt find one, or is there a circuit I
>could build on a DIP header to replace them. I could probably design
>one but I wanted something tried an tested as I dont want to put my
>counter board at more risk than I have to.
>
>Jimmie

You might try reducing the current to the nixies by adding some series
resistance. Those 74141s are going to get hard to get. I made a
clock with nixies in the early 70's and it is still working fine.

W0BF

384. Re: Silenced Hams Mean Safer County

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-04 00:32:23 UTC
From: "D. Stussy" <spam@bde-arc.ampr.org>
Message-ID: <gr69r5$l4t$1@aux.snarked.org>
Source record: 3037
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Jim Lux" <james.p.lux@jpl.nasa.gov> wrote in message
news:gr0pkhome2@news.jpl.nasa.gov...
> Reinhard Zwirner wrote:
> > News Features schrieb:
> >> SILENCED HAMS MEAN SAFER COUNTY
> >
> > I do really hope that this article is related to today's date ...
> >
> > Reinhard
> Google "Los Angeles Press-Telegram", the purported source..

RE- google: And your point is?

Although the main newspaper in LA (City) is the Times, there is a newspaper
in LA County called the Press-Telegram. It's in Long Beach.

The date of the article is conclusive; the name of the alleged newspaper is
NOT - it's a common mistake. The LBPT does have some readership in LA.
It's one of the County's major regional papers.

385. Re: nixie driver

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-04 06:20:36 UTC
From: geek <geek@localhost.localdomain>
Message-ID: <pan.2009.04.04.06.20.36.514124@localhost.localdomain>
Source record: 3038

Yeah, a handful of MPSA42.

If you find a reliable source of 74141, I'm in for some too.

Cheers!

386. Re: nixie driver

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-04 07:17:51 UTC
From: Norm Mann <folder0735@hotmail.com>
Message-ID: <zQDBI.1517$Q52.623@nwrddc02.gnilink.net>
Source record: 3039

"JIMMIE" <JIMMIEDEE123@YAHOO.COM> wrote in message
news:83cd6cb3-043d-4bf3-ac92-4dd429e7a7bc@q9g2000yqc.googlegroups.com...
>I have a Systron Donner frequency counter that uses Nixie tubes. The
> counter works fine but I am forever replacing the Nixie drivers
> 74141s. I started to use it this AM an one was out. Is there a
> replacement for the 74141, I couldnt find one, or is there a circuit I
> could build on a DIP header to replace them. I could probably design
> one but I wanted something tried an tested as I dont want to put my
> counter board at more risk than I have to.

The 7441 appears to be pin-for-pin compatible, but with a different decode pattern (one element is always on). It sounds like you might first want to check the nixie power supply voltage, not just using a voltmeter, but with a scope to see if it has spikes which might be destroying your driver outputs. This is much more likely if the counter is using leading zero suppression and the failed drivers are in the group which often in the blanked state.

HTH,

-NM

387. Re: Silenced Hams Mean Safer County

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-04 13:55:58 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <QvJBI.24607$v8.5525@bignews5.bellsouth.net>
Source record: 3040
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Reinhard Zwirner wrote:
> News Features schrieb:
>> SILENCED HAMS MEAN SAFER COUNTY
>
> I do really hope that this article is related to today's date ...
>
> Reinhard
It is.
If it were real, it would be the first law I'd break, then after
being arrested take the bastards to federal court, sue, win a gazillion
dollars and retire.

388. Re: nixie driver

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-04 13:58:57 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <EyJBl.24609$v8.6061@bignews5.bellsouth.net>
Source record: 3041

JIMMIE wrote:
> I have a Systron Donner frequency counter that uses Nixie tubes. The
> counter works fine but I am forever replacing the Nixie drivers
> 74141s. I started to use it this AM an one was out. Is there a
> replacement for the 74141, I couldnt find one, or is there a circuit I
> could build on a DIP header to replace them. I could probably design
> one but I wanted something tried an tested as I dont want to put my
> counter board at more risk than I have to.
>
> Jimmie
The chips are failing for one of two reasons, over voltage or over
current. Try reducing the supply voltage to the minimum that will light
the nixies. Also try heatsinking the 74141's. They do make clip on
heatsinks for dip packages, but you can just superglue scraps of
aluminum to the top of the chips.

389. Re: nixie driver

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-04 15:09:26 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <f25fafc3-51f3-4a48-a8fc-f4e351e50431@37g2000yqp.googlegroups.com>
Source record: 3042

On Apr 4, 9:58 am, ken scharf <wa2mzeNOSPAMB...@bellsouth.net> wrote:
> JIMMIE wrote:
> > I have a Systron Donner frequency counter that uses Nixie tubes. The
> > counter works fine but I am forever replacing the Nixie drivers
> > 74141s. I started to use it this AM an one was out. Is there a
> > replacement for the 74141, I couldnt find one, or is there a circuit I
> > could build on a DIP header to replace them. I could probably design
> > one but I wanted something tried an tested as I dont want to put my
> > counter board at more risk than I have to.
>
> > Jimmie
>
> The chips are failing for one of two reasons, over voltage or over
> current. Try reducing the supply voltage to the minimum that will light
> the nixies. Also try heatsinking the 74141's. They do make clip on
> heatsinks for dip packages, but you can just superglue scraps of
> aluminum to the top of the chips.

This has been a problem on two different Systron Donner counters I own
and one we used at work years ago. It was such a regular thing at work
we added sockets to facilitate replacing the chips. I have done
likewise to mine but only as the chips failed. There are still a
couple of origonal chips in it. Mycounters are model 6153. I have
never had a schematic or manual for them and
This makes maintaining them a little difficult but having two of them
helps allowing me to compare signals and swap boards to help isolate
problems. If anyone has a schematic I would greatly appreciate it.

Jimmie

390. Re: Silenced Hams Mean Safer County

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-04 16:27:28 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <INWdnc5yE8TtF0rUnZ2dnUVZ_rudnZ2d@bright.net>
Source record: 3043
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

ken scharf wrote:
> Reinhard Zwirner wrote:
>> News Features schrieb:
>>> SILENCED HAMS MEAN SAFER COUNTY
>>
>> I do really hope that this article is related to today's date ...
>>
>> Reinhard
> It is.
> If it were real, it would be the first law I'd break, then after
> being arrested take the bastards to federal court, sue, win a gazillion
> dollars and retire.

Would that be a gazillion dollars hot off the printing presses? You
might want to get that payment in gold and silver ;)

391. Re: Silenced Hams Mean Safer County

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-04 17:53:40 UTC
From: JB <nospam@goofball.net>
Message-ID: <E8NBl.1530$6n.937@nwrddc01.gnilink.net>
Source record: 3044
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

> Although the main newspaper in LA (City) is the Times, there is a
newspaper
> in LA County called the Press-Telegram. It's in Long Beach.
>
> The date of the article is conclusive; the name of the alleged newspaper
is
> NOT - it's a common mistake. The LBPT does have some readership in LA.
> It's one of the County's major regional papers.
>
But the story can't be found on their website, nor can any story referenced
to ham radio.

392. Re: Boys Book Of Radio And Electronics - Destroyed!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-05 00:19:21 UTC
From: RadioGuy <nospam@nospam.com>
Message-ID: <dOSBI.524136$Mh5.272210@bgtnsc04-news.ops.worldnet.att.net>
Source record: 3045

"RadioGuy" <nospam@nospam.com> wrote in message
news:uTvzl.87505$4m1.30306@bgtnsc05-news.ops.worldnet.att.net...
>
> "Bill M" <radioexray@geemail.com> wrote in message
> news:gqjdn601lsv@news4.newsguy.com...
>> http://www.snopes.com/inboxer/pending/cpsia.asp
>
> Good link and the references were appreciated though the discussion was a
> bit confusing.
>
> So in other words to all those that have suspect items; err on the safe
> side and discard them safely so as to avoid any possible infractions and
> liabilities.
>
I guess CPSC isn't stopping with books... now its all terrain vehicles!

It seems that CPSC is using lead as a method of legislating anything 'they'
don't want out of existence by claiming that it is unsafe for childeren. I
don't see this trend stopping anytime soon---it will be interesting to see
whats next.

393. Wanted: Info on Testing Cordless Phones

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-05 16:03:26 UTC
From: Norm VE3CZI <ve3czi@arrl.net>
Message-ID: <nD4Cl.23509$gf.3673@read1.cgocable.net>
Source record: 3046
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

I have been requested to test some of those Cordless Telephones that are so popular today.
However, We have a Computerized Phone System and can not get to an outside line to get the 50V and Dial Tone to test the incoming rings OR to test it's outgoing operation.

Does anyone (1) Have or know of a device that I could buy or (2) Information & Schematic so I could construct such a device myself.

Tnx for all comments..... 73...Norm VE3CZI www.rodemi.com

394. Re: Wanted: Info on Testing Cordless Phones

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-05 19:57:17 UTC
From: "Geoffrey S. Mendelson" <gsm@mendelson.com>
Message-ID: <slrngti39a.cei.gsm@cable.mendelson.com>
Source record: 3047
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Norm VE3CZI wrote:
> I have been requested to test some of those Cordless Telephones that are so
> popular today.
> However, We have a Computerized Phone System and can not get to an outside
> line to get the 50V and Dial Tone to test the incoming rings OR to test it's
> outgoing operation.
>
> Does anyone (1) Have or know of a device that I could buy or (2)
> Information & Schematic so I could construct such a device myself.

Linksys PAP2 or any one of the hundreds of other devices?

If you are not into SIP, you can get one that connects via USB to a computer
and is driven by SKYPE.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM

395. Re: Silenced Hams Mean Safer County

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-05 21:31:02 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <kn9Cl.4951$Lr6.2011@flpi143.ffdc.sbc.com>
Source record: 3048
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

JB wrote:
> lanews.com is a fake spam site
>
> So how do you keep April fools jokes from being picked up by wackos that
> quote it as gospel and try to institute illegal measures in their own
> jurisdiction to drag people down by forcing them to defend themselves at
> great cost or default, like they tried to do in Lancaster.
>
> Quit picking on ham radio.
>
> Instead, lets tell the one where the leader decides a small but identifiable
> group is to blame for all the ills of the world and should be outlawed,
> forced to labor and finally exterminated. Oh wait! That really happened!
>
>
>
> "News Features" <news@lanews.com> wrote in message
> news:JXNAl.23466$Ws1.4318@nlpi064.nbdc.sbc.com...
>> SILENCED HAMS MEAN SAFER COUNTY
>

Gentlemen and Ladies;

Let's not forget that this story is purported to occur in the Peoples Democratic Republic of California. There was a City Council out there that recently tried to ban the possession of DiHydrogen MonoOxide as a deadly and extremely hazardous substance. The measure almost passed when someone noticed that the chemical formula was H20.....

Anything can happen out there in the land of fruits and nuts. (with apologizes to my relatives in San Diego.

396. Re: Wanted: Info on Testing Cordless Phones

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-06 03:06:51 UTC
From: JB <nospam@goofball.net>
Message-ID: <fleCl.1936$Q52.1526@nwrddc02.gnilink.net>
Source record: 3049
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Call the phone guy.

397. Re: Wanted: Info on Testing Cordless Phones

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-06 18:01:19 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <QrrCl.11585$%54.2387@nlpi070.nbdc.sbc.com>
Source record: 3050
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Norm VE3CZI wrote:
> I have been requested to test some of those Cordless Telephones that are so
> popular today.
> However, We have a Computerized Phone System and can not get to an outside
> line to get the 50V and Dial Tone to test the incoming rings OR to test it's
> outgoing operation.
>
> Does anyone (1) Have or know of a device that I could buy or ...

Yes, maybe this suits your needs:

http://www.digitalproductsco.com/

It's a friend of mine. But remember, this is for the phone standard used
in the continental US. I don't know if Canada is the same.

--
73, Joerg

398. Cassegrain Antenna development

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-06 18:27:25 UTC
From: Emanuele Colucci <emack@gameprog.it>
Message-ID: <49da4991$0$830$4fafbaef@reader5.news.tin.it>
Source record: 3051

Hi there,
this is my first post here, hope not being off topic :)
I was asking myself if there were resources over the net that cover the
development of a cassegrain antenna [from the design up to the building]
in a homebrew fashion.

Thank you for paying attention towards this mail :)

Bye bye

Emanuele Colucci
emack@gameprog.it

399. Re: Boys Book Of Radio And Electronics - Destroyed!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-06 18:45:06 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <grdiji$do4e$1@tr22n12.aset.psu.edu>
Source record: 3052

RadioGuy wrote:
> "RadioGuy" <nospam@nospam.com> wrote in message
> news:uTvzl.87505$4m1.30306@bgtnsc05-news.ops.worldnet.att.net...
>> "Bill M" <radioexray@geemail.com> wrote in message
>> news:gqjdn601lsv@news4.newsguy.com...
>>> http://www.snopes.com/inboxer/pending/cpsia.asp
>> Good link and the references were appreciated though the discussion was a
>> bit confusing.
>>
>> So in other words to all those that have suspect items; err on the safe
>> side and discard them safely so as to avoid any possible infractions and
>> liabilities.
>>
> I guess CPSC isn't stopping with books... now its all terrain vehicles!

Where did that come from?

>
> It seems that CPSC is using lead as a method of legislating anything 'they'
> don't want out of existence by claiming that it is unsafe for childeren. I
> don't see this trend stopping anytime soon---it will be interesting to see
> whats next.

See that red dot that says "false"?

Confusing language and the law of unintended consequences is the
problem, no vast conspiracy to deprive people of their old books or kids
clothing. So it's been delayed. Maybe we can now go back to chemtrails
or something......

400. Re: Cassegrain Antenna development

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-06 18:51:31 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrngtkjpj.2r6p.bit-bucket@shell.config.com>
Source record: 3053

On Mon, 06 Apr 2009 20:27:25 +0200, Emanuele Colucci wrote:
> Hi there,
> this is my first post here, hope not being off topic :)

After all the Off Topic postings on lead in childrens books and cordless phone tests equipment, yours is the first truly On Topic post I've seen in quite some time! Thank you!! :-)

But, alas, I can give you no advice on your search for cassegrain antenna design.

Regards,
Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
38.24N 104.55W | @ config.com | Jonesy | OS/2
* Killfiling google & XXXXbanter.com: jonz.net/ng.htm

401. Re: Cassegrain Antenna development

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-07 00:03:33 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <CuOdnX98apGJF0fUnZ2dnUVZ_j6WnZ2d@earthlink.com>
Source record: 3054

"Emanuele Colucci" <emack@gameprog.it> wrote in message
news:49da4991$0$830$4fafbaef@reader5.news.tin.it...
> Hi there,
> this is my first post here, hope not being off topic :)
> I was asking myself if there were resources over the net that cover the
> development of a cassegrain antenna [from the design up to the building]
> in a homebrew fashion.
>
> Thank you for paying attention towards this mail :)
>
> Bye bye
>
> Emanuele Colucci
> emack@gameprog.it

Not off topic at all. You may want to try the rec.radio.amateur.antenna
group.

402. Re: Cassegrain Antenna development

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-07 00:59:17 UTC
From: johncincotta@gmail.com
Message-ID: <50b9c3e6-5186-4a0d-ae48-b0d94de36a06@n7g2000prc.googlegroups.com>
Source record: 3055

On Apr 6, 11:27 am, Emanuele Colucci <em...@gameprog.it> wrote:
> Hi there,
> this is my first post here, hope not being off topic :)
> I was asking myself if there were resources over the net that cover the
> development of a cassegrain antenna [from the design up to the building]
> in a homebrew fashion.
>
> Thank you for paying attention towards this mail :)
>
> Bye bye
>
> Emanuele Colucci
> em...@gameprog.it

you might try w1ghz I believe he has some stuff(spreadsheet) to
calculate params for a cas.
you might also look into optical design software a cas is the same
just the wavelength is longer in the one you are probably thinking of.

good luck
73 de n6plr

403. Seeking New FAQ/Intro Maintainers for rec.radio.amateur.*

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-07 06:05:01 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/recruitment-1-1239084301@panix.com>
Source record: 3056
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/recruitment
Revision: 1.1 2007/09/29 18:42:47
Posting-Frequency: posted monthly
URL: http://www.faqs.org/faqs/radio/personal-intro/

Changes followed by "|".

The rec.radio.info newsgroup, first established in 1993, has been
recently revived by an active moderation team. We are currently seeking
suitable information, FAQ, and bulletin articles from the entire
rec.radio.* newsgroup hierarchy for simultaneous cross-posting to our
newsgroup.

We are seeking a replacement maintainer for the following information
bulletin formerly posted to rec.radio.amateur.* (and currently archived
at http://www.faqs.org/faqs/radio/personal-intro/ ):

radio/personal-intro
Subject: Guide to the rec.radio Newsgroups
Maintainer: jeffreyh@Hawaii.Edu (Jeffrey Herman)
Last Posted: 9 Nov 2001 06:18:17 GMT
Posting-Frequency: 15th of each month

We are willing to provide any technical support necessary to get this
article updated and automatically posted again at a regular interval.
This would include establishing contact with the original maintainer for
any necessary permissions. We would prefer to seek a new, dedicated
maintainer at this time, rather than start auto-posting the original
article ourselves.

For more information about our newsgroup, see:

http://www.panix.com/~rram/usenet/rri/index.html

Please direct any comments, questions, or criticisms to
rec-radio-info-request@panix.com.
```

404. Re: Cassegrain Antenna development

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-07 17:48:39 UTC
From: Emanuele Colucci <emack@gameprog.it>
Message-ID: <49db91fa$0$1114$4fafbaef@reader2.news.tin.it>
Source record: 3057

Many thanks to everyone answered my message :)

> you might try w1ghz I believe he has some stuff(spreadsheet) to
> calculate params for a cas.

Yep, I saw. :)

> you might also look into optical design software a cas is the same
> just the wavelength is longer in the one you are probably thinking of.

Could you explain which software do you mean? For optical design do you
mean optical cas telescope or optical geometry approximation?

Thank you again!

Emanuele Colucci
emack@gameprog.it

405. Free "lofer" Radio Scrap Books

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-07 21:34:28 UTC
From: "Myron A. Calhoun" <mcalhoun@ksu.edu>
Message-ID: <de7ae273-95a4-483a-b484-fa92eb613813@h28g2000yqd.googlegroups.com>
Source record: 3058

I'm finally admitting there are some interesting aspects
of radio that I'm not going to live long enough to get around to, so
I'll send the following to the first technically-oriented person who
agrees to pay $10 for postage (inside the USA) and my trip to the
Post Office:

The low and medium frequency radio scrap book
Addendum '77/'78 for thr low and medium radio....
both "From the Editors of ham radio/
Ken Cornell, W2IMB"

A collection of articles and writings about antennas, receivers,
loops, coils, and coil winding for getting on the VLF "lowfer" band.
Mostly tube gear with transistor gear mostly in the supplements.
About 180 8.5 x 11 pages, 3-hole-punched loose-leaf with heavy paper
covers.

Email W0PBV@ARRL.net if you want them.

406. Re: nixie driver

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-08 13:51:53 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <01029c48-2d92-46cf-ac3f-cdc0ded782aa@f14g2000vbf.googlegroups.com>
Source record: 3059

On Apr 3, 10:34 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> I have a Systron Donner frequency counter that uses Nixie tubes. The
> counter works fine but I am forever replacing the Nixie drivers
> 74141s. I started to use it this AM an one was out. Is there a
> replacement for the 74141, I couldnt find one, or is there a circuit I
> could build on a DIP header to replace them. I could probably design
> one but I wanted something tried an tested as I dont want to put my
> counter board at more risk than I have to.

Domestic 74141's are hard to find these days but on E-bay the Russian
equivalent is very common.

Yes, you could build just about anything with a one-of-ten decoder and
some current-sink drivers to do the same.

If the goal isn't nixie tubes but is a working frequency counter, you
could probably put the counter up on E-bay for somebody who wants
nixie tubes, and use the money to buy several superior frequency
counters.

Tim N3QE

407. Re: nixie driver

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-09 01:52:27 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <730ba22a-3477-4ec5-8615-1432871e624a@h28g2000yqd.googlegroups.com>
Source record: 3060

On Apr 8, 9:51 am, Tim Shoppa <sho...@trailing-edge.com> wrote:
> On Apr 3, 10:34 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
>
> > I have a Systron Donner frequency counter that uses Nixie tubes. The
> > counter works fine but I am forever replacing the Nixie drivers
> > 74141s. I started to use it this AM an one was out. Is there a
> > replacement for the 74141, I couldnt find one, or is there a circuit I
> > could build on a DIP header to replace them. I could probably design
> > one but I wanted something tried an tested as I dont want to put my
> > counter board at more risk than I have to.
>
> Domestic 74141's are hard to find these days but on E-bay the Russian
> equivalent is very common.
>
> Yes, you could build just about anything with a one-of-ten decoder and
> some current-sink drivers to do the same.
>
> If the goal isn't nixie tubes but is a working frequency counter, you
> could probably put the counter up on E-bay for somebody who wants
> nixie tubes, and use the money to buy several superior frequency
> counters.
>
> Tim N3QE

I forgot that the 74141 was also a decoder chip. I was thinking it was
just a driver. That complicates things a bit.
As far as the quality of the counter goes it works just fine and I
still have a few 74141s though my supply is getting low. I may try
some of the Russian chips.

JImmie

408. Re: nixie driver

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-09 10:02:37 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <Wd-dnSJwO6ogWkDUnZ2dnUVZ_iydnZ2d@bright.net>
Source record: 3061

JIMMIE wrote:
> On Apr 8, 9:51 am, Tim Shoppa <sho...@trailing-edge.com> wrote:
>> On Apr 3, 10:34 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
>>
>>> I have a Systron Donner frequency counter that uses Nixie tubes. The
>>> counter works fine but I am forever replacing the Nixie drivers
>>> 74141s. I started to use it this AM an one was out. Is there a
>>> replacement for the 74141, I couldnt find one, or is there a circuit I
>>> could build on a DIP header to replace them. I could probably design
>>> one but I wanted something tried an tested as I dont want to put my
>>> counter board at more risk than I have to.
>> Domestic 74141's are hard to find these days but on E-bay the Russian
>> equivalent is very common.
>>
>> Yes, you could build just about anything with a one-of-ten decoder and
>> some current-sink drivers to do the same.
>>
>> If the goal isn't nixie tubes but is a working frequency counter, you
>> could probably put the counter up on E-bay for somebody who wants
>> nixie tubes, and use the money to buy several superior frequency
>> counters.
>>
>> Tim N3QE
>
> I forgot that the 74141 was also a decoder chip. I was thinking it was
> just a driver. That complicates things a bit.
> As far as the quality of the counter goes it works just fine and I
> still have a few 74141s though my supply is getting low. I may try
> some of the Russian chips.
>
>
> JImmie

As I noted in a previous email, the 74141 is still available, but
looking at Mouser, I see they are not exactly cheap...but...it beats
hacking up a piece of equipment and trying to use a completely different
part...here's the link to Mouser's part...

http://www.mouser.com/Search/Refine.aspx?Keyword=nte74141

Scott
N0EDV

409. Re: nixie driver

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-09 10:02:53 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <Wd-dnV1wO6pQWkDUnZ2dnUVZ_iwAAAAA@bright.net>
Source record: 3062

JIMMIE wrote:
> On Apr 8, 9:51 am, Tim Shoppa <sho...@trailing-edge.com> wrote:
>> On Apr 3, 10:34 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
>>
>>> I have a Systron Donner frequency counter that uses Nixie tubes. The
>>> counter works fine but I am forever replacing the Nixie drivers
>>> 74141s. I started to use it this AM an one was out. Is there a
>>> replacement for the 74141, I couldnt find one, or is there a circuit I
>>> could build on a DIP header to replace them. I could probably design
>>> one but I wanted something tried an tested as I dont want to put my
>>> counter board at more risk than I have to.
>> Domestic 74141's are hard to find these days but on E-bay the Russian
>> equivalent is very common.
>>
>> Yes, you could build just about anything with a one-of-ten decoder and
>> some current-sink drivers to do the same.
>>
>> If the goal isn't nixie tubes but is a working frequency counter, you
>> could probably put the counter up on E-bay for somebody who wants
>> nixie tubes, and use the money to buy several superior frequency
>> counters.
>>
>> Tim N3QE
>
> I forgot that the 74141 was also a decoder chip. I was thinking it was
> just a driver. That complicates things a bit.
> As far as the quality of the counter goes it works just fine and I
> still have a few 74141s though my supply is getting low. I may try
> some of the Russian chips.
>
>
> JImmie

It appears they still make the 74141. Here's a list of suppliers
according to NTE...

http://dilp.netcomponents.com/cgi-bin/nteinc.asp?partnumber1=nte74141&partnumber2=

Scott
N0EDV

410. Semi rigid coax source

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-09 18:00:00 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <29p1b6-1kc.ln1@mail.specsol.com>
Source record: 3063
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Anyone know of a source for semi rigid coax in general and RG-401 in particular in hobby quantities like 3 to 6 feet?

I can find lots of places willing to sell me a 50 foot spool.

--
Jim Pennino

Remove .spam.sux to reply.

411. Re: Semi rigid coax source

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-09 19:55:39 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <bda6bc83-1106-41da-9ec5-0118cbbacf29@u8g2000yqn.googlegroups.com>
Source record: 3064
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Apr 9, 2:00 pm, j...@specsol.spam.sux.com wrote:
> Anyone know of a source for semi rigid coax in general and RG-401 in
> particular in hobby quantities like 3 to 6 feet?
>
> I can find lots of places willing to sell me a 50 foot spool.
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

I have seen some of the surplus places have it from time to time.
Sometimes a phone call to them will get you things they dont have in
their catalog.

Jimmie

412. Re: Semi rigid coax source

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-09 21:38:39 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <a4581596-2eeb-4456-b2f6-df6367473f5a@f19g2000yqh.googlegroups.com>
Source record: 3065
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Apr 9, 11:00 am, j...@specsol.spam.sux.com wrote:
> Anyone know of a source for semi rigid coax in general and RG-401 in
> particular in hobby quantities like 3 to 6 feet?
>
> I can find lots of places willing to sell me a 50 foot spool.
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

Have you tried asking manufacturers like Micro-Coax who their stocking distributors are? One of the distributors may take pity on you and sell you a small quantity. You _might_ even be able to sweet-talk a manufacturer/rep out of a sample of 3 feet of the stuff.

Cheers,
Tom

413. Re: Semi rigid coax source

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-09 22:00:01 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <lk72b6-n6e.ln1@mail.specsol.com>
Source record: 3066
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

In rec.radio.amateur.antenna K7ITM <k7itm@msn.com> wrote:
> On Apr 9, 11:00 am, j...@specsol.spam.sux.com wrote:
>> Anyone know of a source for semi rigid coax in general and RG-401 in
>> particular in hobby quantities like 3 to 6 feet?
>>
>> I can find lots of places willing to sell me a 50 foot spool.
>>
>> --
>> Jim Pennino
>>
>> Remove .spam.sux to reply.
>
> Have you tried asking manufacturers like Micro-Coax who their stocking
> distributors are? One of the distributors may take pity on you and
> sell you a small quantity. You _might_ even be able to sweet-talk a
> manufacturer/rep out of a sample of 3 feet of the stuff.
>
> Cheers,
> Tom

Almost all the distributors are willing to sell short lengths with
an added flat, short length, cutting fee ranging from $15 to $25,
which at the price of this stuff may be the way to go.

--
Jim Pennino

Remove .spam.sux to reply.

414. Re: Semi rigid coax source

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-09 22:01:25 UTC
From: MTV <volztexas355@comcast.net>
Message-ID: <_euDl.12227$5q1.10098@en-nntp-01.dc1.easynews.com>
Source record: 3067
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

jimp@specsol.spam.sux.com wrote:
> Anyone know of a source for semi rigid coax in general and RG-401 in
> particular in hobby quantities like 3 to 6 feet?
>
> I can find lots of places willing to sell me a 50 foot spool.
>
>

Cable Experts: www.cablexperts.com

Marv

415. Re: Semi rigid coax source

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-10 02:26:01 UTC
From: amdx <amdx@knology.net>
Message-ID: <8c3d6$49deae3b$18d6b40c$31595@KNOLOGY.NET>
Source record: 3068
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

<jimp@specsol.spam.sux.com> wrote in message
news:29p1b6-1kc.ln1@mail.specsol.com...
> Anyone know of a source for semi rigid coax in general and RG-401 in
> particular in hobby quantities like 3 to 6 feet?
>
> I can find lots of places willing to sell me a 50 foot spool.
>
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

Ebay has RG402 in 10 ft sections 1.5 times more loss (only .26db additional
for 10ft) and smaller diameter.

http://shop.ebay.com/items/?_nkw=1673a+rg402+rg401&_in_kw=2&_ex_kw=&_sacat=See-All-Categor
ies&_okw=1673a+rg402+rg401&_oexkw=&_udlo=&_udhi=&_ftrt=901&_ftrv=1&_sabdlo=&_sabdhi=&_sami
low=&_samihi=&_sadis=200&_fpos=Zip+code&_fsct=&LH_SALE_CURRENCY=0&_sop=12&_dmd=1&_ipg=50

416. Need help with GPIB on HP 3586

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-13 13:23:29 UTC
From: John KD5YI <groups2_dot_jocjo@xoxy.net>
Message-ID: <I1HEI.657$WK5.613@nwrddc01.gnilink.net>
Source record: 3069

I have questions like:

* The 3586 manual says in one place that the frequency increase/decrease buttons do not function in the remote mode. In the chart of commands, it says that the GPIB command for increase is UP and the GPIB command for decrease is DN. Does anyone know whether these are valid commands or not?

* Can anyone provide a step-by-step procedure for the command sequence to read the 3586 signal magnitude using GPIB?

* Which GPIB adaptor do you use?

Many thanks.

Cheers,
John - KD5YI

417. Re: nixie driver

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-13 15:45:23 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <i3JEl.5384$Lr6.4870@flpi143.ffdc.sbc.com>
Source record: 3070

JIMMIE wrote:
> On Apr 8, 9:51 am, Tim Shoppa <sho...@trailing-edge.com> wrote:
>> On Apr 3, 10:34 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
>>
>>> I have a Systron Donner frequency counter that uses Nixie tubes. The
>>> counter works fine but I am forever replacing the Nixie drivers
>>> 74141s. I started to use it this AM an one was out. Is there a
>>> replacement for the 74141, I couldnt find one, or is there a circuit I
>>> could build on a DIP header to replace them. I could probably design
>>> one but I wanted something tried an tested as I dont want to put my
>>> counter board at more risk than I have to.
>> Domestic 74141's are hard to find these days but on E-bay the Russian
>> equivalent is very common.
>>
>> Yes, you could build just about anything with a one-of-ten decoder and
>> some current-sink drivers to do the same.
>>
>> If the goal isn't nixie tubes but is a working frequency counter, you
>> could probably put the counter up on E-bay for somebody who wants
>> nixie tubes, and use the money to buy several superior frequency
>> counters.
>>
>> Tim N3QE
>
> I forgot that the 74141 was also a decoder chip. I was thinking it was
> just a driver. That complicates things a bit.
> As far as the quality of the counter goes it works just fine and I
> still have a few 74141s though my supply is getting low. I may try
> some of the Russian chips.
>

If this keeps going on and becomes a money pit without a bottom there is
still the unthinkable: Hack the counter and put 7-segment LED displays
in it. Ok, all that nice Nixie-ambience will be lost but you can apply
those $7-8 per 74141 towards a more worthy cause, like a nice six-pack
of fine porter or pale ale :-)

To maintain somewhat of a vintage look: For a brief time period there
were 7-segment displays with small filaments in there. But could be
tough to find in surplus store and usually you have to buy the equipment
around them along with the display. Another nice option (if there is
enough space depth-wise) were displays with individual lamps and number
lenses. Those look really cool.

Also helpful could be to use a DSO and scope out what happens when the counter gets turned on and off, and when the numbers are changing wildly. Maybe some electrolytic cap has dried out and an overvoltage spike shows up only the Nixie supply rail, occasionally frying a driver. Ground contacts in the driver board area are also worth to be checked out.

--
73, Joerg

418. Re: nixie driver

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-13 21:47:59 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <SkOEl.28745$qa.6649@bignews4.bellsouth.net>
Source record: 3071

Joerg wrote:
> JIMMIE wrote:
>> On Apr 8, 9:51 am, Tim Shoppa <sho...@trailing-edge.com> wrote:
>>> On Apr 3, 10:34 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
>>>
>>>> I have a Systron Donner frequency counter that uses Nixie tubes. The
>>>> counter works fine but I am forever replacing the Nixie drivers
>>>> 74141s. I started to use it this AM an one was out. Is there a
>>>> replacement for the 74141, I couldnt find one, or is there a circuit I
>>>> could build on a DIP header to replace them. I could probably design
>>>> one but I wanted something tried an tested as I dont want to put my
>>>> counter board at more risk than I have to.
>>> Domestic 74141's are hard to find these days but on E-bay the Russian
>>> equivalent is very common.
>>>
>>> Yes, you could build just about anything with a one-of-ten decoder and
>>> some current-sink drivers to do the same.
>>>
>>> If the goal isn't nixie tubes but is a working frequency counter, you
>>> could probably put the counter up on E-bay for somebody who wants
>>> nixie tubes, and use the money to buy several superior frequency
>>> counters.
>>>
>>> Tim N3QE
>>
>> I forgot that the 74141 was also a decoder chip. I was thinking it was
>> just a driver. That complicates things a bit.
>> As far as the quality of the counter goes it works just fine and I
>> still have a few 74141s though my supply is getting low. I may try
>> some of the Russian chips.
>>
>
> If this keeps going on and becomes a money pit without a bottom there is
> still the unthinkable: Hack the counter and put 7-segment LED displays
> in it. Ok, all that nice Nixie-ambience will be lost but you can apply
> those $7-8 per 74141 towards a more worthy cause, like a nice six-pack
> of fine porter or pale ale :-)
>
> To maintain somewhat of a vintage look: For a brief time period there
> were 7-segment displays with small filaments in there. But could be
> tough to find in surplus store and usually you have to buy the equipment
> around them along with the display. Another nice option (if there is
> enough space depth-wise) were displays with individual lamps and number
> lenses. Those look really cool.

>
> Also helpful could be to use a DSO and scope out what happens when the
> counter gets turned on and off, and when the numbers are changing
> wildly. Maybe some electrolytic cap has dried out and an overvoltage
> spike shows up only the Nixie supply rail, occasionally frying a driver.
> Ground contacts in the driver board area are also worth to be checked out.
>
Use the 74141 (or a 7441 I think is the lv version of the 1 out of 10
decoder) to drive HV NPN transistors. The 2n5400/5401 pnp and
2n5550/2n5551 npn are dirt cheap 120/150 volt transistors that could be
used.

419. Re: Need help with GPIB on HP 3586

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-14 01:38:21 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <IOREI.23902$c45.16523@nlpi065.nbdc.sbc.com>
Source record: 3072

John KD5YI wrote:
> I have questions like:
>
> * The 3586 manual says in one place that the frequency increase/decrease
> buttons do not function in the remote mode. In the chart of commands, it
> says that the GPIB command for increase is UP and the GPIB command for
> decrease is DN. Does anyone know whether these are valid commands or not?
>
> * Can anyone provide a step-by-step procedure for the command sequence
> to read the 3586 signal magnitude using GPIB?
>

No idea, but why not just try it out? In case you don't have all the
manuals they can be found here, scroll down about 40%:

http://www.w5jgv.com/amateur_radio.htm

> * Which GPIB adaptor do you use?
>

The Prologix USB. Works fine (after finding a level threshold bug and
the designer made new firmware for it).

--
73, Joerg

420. Re: Need help with GPIB on HP 3586

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-14 02:22:06 UTC
From: John KD5YI <groups2_dot_jocjo@xoxy.net>
Message-ID: <irSEl.793$b11.78@nwrddc02.gnilink.net>
Source record: 3073

"Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
news:lOREl.23902$c45.16523@nlpi065.nbdc.sbc.com...
> John KD5YI wrote:
>> I have questions like:
>>
>> * The 3586 manual says in one place that the frequency increase/decrease
>> buttons do not function in the remote mode. In the chart of commands, it
>> says that the GPIB command for increase is UP and the GPIB command for
>> decrease is DN. Does anyone know whether these are valid commands or not?
>>
>> * Can anyone provide a step-by-step procedure for the command sequence to
>> read the 3586 signal magnitude using GPIB?
>>
>
> No idea, but why not just try it out? In case you don't have all the
> manuals they can be found here, scroll down about 40%:
>
> http://www.w5jgv.com/amateur_radio.htm
>
>
>> * Which GPIB adaptor do you use?
>>
>
> The Prologix USB. Works fine (after finding a level threshold bug and the
> designer made new firmware for it).
>
> --
> 73, Joerg

Hi, Joerg -

I was using a Softmark USB-GPIB unit. Although they responded to commands, I spent about 20 hours trying to get a reply other than gibberish from three different instruments with no success. I may have to roll my own controller, but first I have to understand GPIB.

Thanks for the link, but I already have the manuals. It is the operator's manual that I referred to above when I pointed out what I think is a contradiction.

73,
John

421. Re: nixie driver

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-14 15:23:35 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <b3fdebe3-37c4-4cc3-b15a-6401e9ee27a1@v15g2000yqn.googlegroups.com>
Source record: 3074

On Apr 13, 5:47 pm, ken scharf <wa2mzeNOSPAMB...@bellsouth.net> wrote:
> Joerg wrote:
> > JIMMIE wrote:
> >> On Apr 8, 9:51 am, Tim Shoppa <sho...@trailing-edge.com> wrote:
> >>> On Apr 3, 10:34 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
>
> >>>> I have a Systron Donner frequency counter that uses Nixie tubes. The
> >>>> counter works fine but I am forever replacing the Nixie drivers
> >>>> 74141s. I started to use it this AM an one was out. Is there a
> >>>> replacement for the 74141, I couldnt find one, or is there a circuit I
> >>>> could build on a DIP header to replace them. I could probably design
> >>>> one but I wanted something tried an tested as I dont want to put my
> >>>> counter board at more risk than I have to.
> >>> Domestic 74141's are hard to find these days but on E-bay the Russian
> >>> equivalent is very common.
>
> >>> Yes, you could build just about anything with a one-of-ten decoder and
> >>> some current-sink drivers to do the same.
>
> >>> If the goal isn't nixie tubes but is a working frequency counter, you
> >>> could probably put the counter up on E-bay for somebody who wants
> >>> nixie tubes, and use the money to buy several superior frequency
> >>> counters.
>
> >>> Tim N3QE
>
> >> I forgot that the 74141 was also a decoder chip. I was thinking it was
> >> just a driver. That complicates things a bit.
> >> As far as the quality of the counter goes it works just fine and I
> >> still have a few 74141s though my supply is getting low. I may try
> >> some of the Russian chips.
>
> > If this keeps going on and becomes a money pit without a bottom there is
> > still the unthinkable: Hack the counter and put 7-segment LED displays
> > in it. Ok, all that nice Nixie-ambience will be lost but you can apply
> > those $7-8 per 74141 towards a more worthy cause, like a nice six-pack
> > of fine porter or pale ale :-)
>
> > To maintain somewhat of a vintage look: For a brief time period there
> > were 7-segment displays with small filaments in there. But could be
> > tough to find in surplus store and usually you have to buy the equipment
> > around them along with the display. Another nice option (if there is
> > enough space depth-wise) were displays with individual lamps and number
> > lenses. Those look really cool.

>
> > Also helpful could be to use a DSO and scope out what happens when the
> > counter gets turned on and off, and when the numbers are changing
> > wildly. Maybe some electrolytic cap has dried out and an overvoltage
> > spike shows up only the Nixie supply rail, occasionally frying a driver.
> > Ground contacts in the driver board area are also worth to be checked out.
>
> Use the 74141 (or a 7441 I think is the lv version of the 1 out of 10
> decoder) to drive HV NPN transistors. The 2n5400/5401 pnp and
> 2n5550/2n5551 npn are dirt cheap 120/150 volt transistors that could be
> used.- Hide quoted text -
>
> - Show quoted text -

I manage to get a dozen chips for $.50 a piece form a mom/pop place I buy parts from. I bought the last they had and probably ever will have.. If I could find a schematic on the thing I would see what I could do about reducing the voltage. Im afraid to do too much experimenting with the thing because its a good counter with at least some sentimental value I dont want to risk damaging it. The back of the counter has a connector with BCD output I guess I could always build a display to work from there.

Systron Donner 6153 if there is a schematic available.

Jimmie

422. superregen resonant cavity for narrow band reception - any prior art?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-14 16:46:20 UTC
From: spamhog <n1jpr@hotmail.com>
Message-ID: <fa8131f8-55db-418b-bdd3-7e2432e4fdd4@r8g2000yql.googlegroups.com>
Source record: 3075

As the sunspot cycle is inching forward, I've been considering adding an upconverter to Charles Kitchin's 50MHz audio-squelched superregen design, in order to make a sensitive and very quickly tuneable 15-30MHz receiver intended to take the pulse of propagation on the higher HF bands. The idea came from an unpretentious Russian design. (No, it wasn't a fremodyne).

In a classic case of mission creep, I observed that a fixed IF lends itself to a further step. I searched for prior art in inducing super-regeneration in a resonant cavity.

If that could help narrowing the passband, it would be a nice trick for upconversion.

I found few and laconic references at almost-otherwordly microwave frequencies, Gunn diodes, folded spectra, etc etc.

If I could make a resonant cavity in no time I'd not ask for advice before jumping in, but this would be my very first, and shooting for 40-60Mz IF it risks being somewhat monumental - short of pigtailing the resonator, or doing a folded design, or some other "Grande Complication" which might negate the very idea of using a cavity.

****** Prior art pointers, anyone? ******

TIA

Filippo N1JPR

P.S.: Just to prempt repetitions of the obvious I'll repeat it myself: Why don't you use a [superhet ¦ xtal roofing filter ¦ downconversion ¦ cod liver oil ¦ snake oil]. Sorry I never heard of it, so it's likely to be a bad idea. Are you a Communist? Never heard of a 40MHz cavity. A superregen won't demod [CW ¦ SSB ¦ [QM¦P]SKxx ¦ delta-sigma ¦ ancient Greek] ! Is this gonna be a portable receiver in that you can put it in the back of a SUV - if someone helps you carry the 6' long cavity, that is? You will need a [BFO ¦ product detector ¦ AMS ¦ DSP ¦ LPF ¦ postprocessing ¦ Photoshop]. IF passband will be too broad, although I have no idea how broad since I never used a cavity for that. :-o

423. Re: superregen resonant cavity for narrow band reception - any prior art?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-14 18:55:06 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <lLOdnfuwre-TQXnUnZ2dnUVZ_v2dnZ2d@web-ster.com>
Source record: 3076

spamhog wrote:
> As the sunspot cycle is inching forward, I've been considering adding
> an upconverter to Charles Kitchin's 50MHz audio-squelched superregen
> design, in order to make a sensitive and very quickly tuneable
> 15-30MHz receiver intended to take the pulse of propagation on the
> higher HF bands. The idea came from an unpretentious Russian design.
> (No, it wasn't a fremodyne).
>
> In a classic case of mission creep, I observed that a fixed IF lends
> itself to a further step. I searched for prior art in inducing super-
> regeneration in a resonant cavity.
>
> If that could help narrowing the passband, it would be a nice trick
> for upconversion.
>
> I found few and laconic references at almost-otherwordly microwave
> frequencies, Gunn diodes, folded spectra, etc etc.
>
> If I could make a resonant cavity in no time I'd not ask for advice
> before jumping in, but this would be my very first, and shooting for
> 40-60Mz IF it risks being somewhat monumental - short of pigtailing
> the resonator, or doing a folded design, or some other "Grande
> Complication" which might negate the very idea of using a cavity.
>
> ****** Prior art pointers, anyone? ******

"Coaxial Line V.H.F. Receivers", Joseph Santangelo, W1NXY, QST, March
1948, volume XXXII, number 3.

Basically it was a superregen using a coaxial cavity to increase the Q.
Reported sizes were 7.5" x 2" for the outer conductor, 7.5" by 0.5"
for the inner. The author's version was silver plated, but he reported
that aluminum and copper had been used. He loaded it with a cap to get
the right frequency.

It didn't look too hard to build, but its going to have to grow for 6m.
You _ought_ to be able to do this with CATV hardline if you don't mind
lots of connectors at the bends or a really long, skinny radio. You
may be able to get a decent Q just using some really efficient
flexible coax, coiled up. I'd even see if I could find some
semi-hardline that I could bend into a serpentine shape, were I playing
with this notion.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Do you need to implement control loops in software?
"Applied Control Theory for Embedded Systems" was written for you.
See details at http://www.wescottdesign.com/actfes/actfes.html

424. Article wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-14 21:05:51 UTC
From: Theo <theodore.twyler@ntlworld.com>
Message-ID: <TU6FI.22916$Le.1499@newsfe12.ams2>
Source record: 3077

Does anyone have a copy of CQ magazine for November 1951 please?
The issue contains a construction article - the "Standard of Comparison"
receiver.
If anyone can supply a high definition copy of this article, or know of an
alternative source, I would be extremely grateful.

Theo

425. Re: Need help with GPIB on HP 3586

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-14 21:21:38 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <E77FI.26956$YU2.4180@nlpi066.nbdc.sbc.com>
Source record: 3079

John KD5YI wrote:
> "Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
> news:lOREl.23902$c45.16523@nlpi065.nbdc.sbc.com...
>> John KD5YI wrote:
>>> I have questions like:
>>>
>>> * The 3586 manual says in one place that the frequency
>>> increase/decrease buttons do not function in the remote mode. In the
>>> chart of commands, it says that the GPIB command for increase is UP
>>> and the GPIB command for decrease is DN. Does anyone know whether
>>> these are valid commands or not?
>>>
>>> * Can anyone provide a step-by-step procedure for the command
>>> sequence to read the 3586 signal magnitude using GPIB?
>>>
>>
>> No idea, but why not just try it out? In case you don't have all the
>> manuals they can be found here, scroll down about 40%:
>>
>> http://www.w5jgv.com/amateur_radio.htm
>>
>>
>>> * Which GPIB adaptor do you use?
>>>
>>
>> The Prologix USB. Works fine (after finding a level threshold bug and
>> the designer made new firmware for it).
>>
>> --
>> 73, Joerg
>
> Hi, Joerg -
>
> I was using a Softmark USB-GPIB unit. Although they responded to
> commands, I spent about 20 hours trying to get a reply other than
> gibberish from three different instruments with no success. I may have
> to roll my own controller, but first I have to understand GPIB.
>

That's what I had at first as well, just gibberish. Turned out the logic
threshold is way too high in the Prologix. Engaging the internal
pull-ups of the uC in there did the trick.

[...]

--
73, Joerg

426. Re: superregen resonant cavity for narrow band reception - any prior art?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-14 21:21:56 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <25ccc6fd-e1a0-43a7-af14-cf12d5ab221b@r33g2000yqn.googlegroups.com>
Source record: 3078

On Apr 14, 2:55 pm, Tim Wescott <t...@seemywebsite.com> wrote:
> spamhog wrote:
> > As the sunspot cycle is inching forward, I've been considering adding
> > an upconverter to Charles Kitchin's 50MHz audio-squelched superregen
> > design, in order to make a sensitive and very quickly tuneable
> > 15-30MHz receiver intended to take the pulse of propagation on the
> > higher HF bands. The idea came from an unpretentious Russian design.
> > (No, it wasn't a fremodyne).
>
> > In a classic case of mission creep, I observed that a fixed IF lends
> > itself to a further step. I searched for prior art in inducing super-
> > regeneration in a resonant cavity.
>
> > If that could help narrowing the passband, it would be a nice trick
> > for upconversion.
>
> > I found few and laconic references at almost-otherwordly microwave
> > frequencies, Gunn diodes, folded spectra, etc etc.
>
> > If I could make a resonant cavity in no time I'd not ask for advice
> > before jumping in, but this would be my very first, and shooting for
> > 40-60Mz IF it risks being somewhat monumental - short of pigtailing
> > the resonator, or doing a folded design, or some other "Grande
> > Complication" which might negate the very idea of using a cavity.
>
> > ******   Prior art pointers, anyone?   ******
>
> "Coaxial Line V.H.F. Receivers", Joseph Santangelo, W1NXY, QST, March
> 1948, volume XXXII, number 3.
>
> Basically it was a superregen using a coaxial cavity to increase the Q.
>   Reported sizes were 7.5" x 2" for the outer conductor, 7.5" by 0.5"
> for the inner. The author's version was silver plated, but he reported
> that aluminum and copper had been used. He loaded it with a cap to get
> the right frequency.
>
> It didn't look too hard to build, but its going to have to grow for 6m.
> You _ought_ to be able to do this with CATV hardline if you don't mind
> lots of connectors at the bends or a really long, skinny radio. You
> _may_ be able to get a decent Q just using some really efficient
> flexible coax, coiled up. I'd even see if I could find some
> semi-hardline that I could bend into a serpentine shape, were I playing
> with this notion.
>

> --
>
> Tim Wescott
> Wescott Design Serviceshttp://www.wescottdesign.com
>
> Do you need to implement control loops in software?
> "Applied Control Theory for Embedded Systems" was written for you.
> See details athttp://www.wescottdesign.com/actfes/actfes.html- Hide quoted text -
>
> - Show quoted text -

I know a guy that built a stripline output circuit for a 6M amp.I
think it was about 4 ft long.

Jimmie

427. CW connector

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-14 22:07:04 UTC
From: David Harmon <source@netcom.com>
Message-ID: <F-qdnRCDEM-qlHjUnZ2dnUVZ_vadnZ2d@earthlink.com>
Source record: 3080

Is there any particular plug/socket type connector that is an accepted
standard or most prevalent kind for connecting a CW key to a radio?

428. Re: CW connector

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-14 22:17:59 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <xNudnZnOQokKlnjUnZ2dnUVZ_qidnZ2d@web-ster.com>
Source record: 3081

David Harmon wrote:
> Is there any particular plug/socket type connector that is an accepted
> standard or most prevalent kind for connecting a CW key to a radio?
>
>
All my older rigs use a 1/4" audio connector, like a mono microphone. I
tend to use 1/8" connectors, for space reasons.

Really old rigs used all sorts of things, often binding posts or tip
jacks.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Do you need to implement control loops in software?
"Applied Control Theory for Embedded Systems" was written for you.
See details at http://www.wescottdesign.com/actfes/actfes.html

429. Re: CW connector

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-14 22:19:26 UTC
From: Bill M <radioexray@geemail.com>
Message-ID: <gs325f011pc@news1.newsguy.com>
Source record: 3082

David Harmon wrote:
> Is there any particular plug/socket type connector that is an accepted
> standard or most prevalent kind for connecting a CW key to a radio?
>
>
Prevalent seems to the the 1/4 inch phone jack.

430. Re: CW connector

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-14 22:33:18 UTC
From: Bert Hyman <bert@iphouse.com>
Message-ID: <Xns9BEDB2606C424VeebleFetzer@216.250.184.7>
Source record: 3083

In news:gs325f011pc@news1.newsguy.com Bill M <radioexray@geemail.com>
wrote:

> David Harmon wrote:
>> Is there any particular plug/socket type connector that is an
>> accepted standard or most prevalent kind for connecting a CW key to a
>> radio?
>>
>>
> Prevalent seems to the the 1/4 inch phone jack.

And if the rig has a built-in keyer, usually of the three-circuit
variety.

--
Bert Hyman St. Paul, MN bert@iphouse.com

431. Re: Need help with GPIB on HP 3586

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-15 03:21:48 UTC
From: John KD5YI <groups2_dot_jocjo@xoxy.net>
Message-ID: <gpcFl.925$b11.646@nwrddc02.gnilink.net>
Source record: 3084

```
"Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
news:E77Fl.26956$YU2.4180@nlpi066.nbdc.sbc.com...
> John KD5YI wrote:
>> "Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
>> news:lOREl.23902$c45.16523@nlpi065.nbdc.sbc.com...
>>> John KD5YI wrote:
>>>> I have questions like:
>>>>
>>>> * The 3586 manual says in one place that the frequency
>>>> increase/decrease buttons do not function in the remote mode. In the
>>>> chart of commands, it says that the GPIB command for increase is UP and
>>>> the GPIB command for decrease is DN. Does anyone know whether these are
>>>> valid commands or not?
>>>>
>>>> * Can anyone provide a step-by-step procedure for the command sequence
>>>> to read the 3586 signal magnitude using GPIB?
>>>>
>>>
>>> No idea, but why not just try it out? In case you don't have all the
>>> manuals they can be found here, scroll down about 40%:
>>>
>>> http://www.w5jgv.com/amateur_radio.htm
>>>
>>>
>>>> * Which GPIB adaptor do you use?
>>>>
>>>
>>> The Prologix USB. Works fine (after finding a level threshold bug and
>>> the designer made new firmware for it).
>>>
>>> --
>>> 73, Joerg
>>
>> Hi, Joerg -
>>
>> I was using a Softmark USB-GPIB unit. Although they responded to
>> commands, I spent about 20 hours trying to get a reply other than
>> gibberish from three different instruments with no success. I may have to
>> roll my own controller, but first I have to understand GPIB.
>>
>
> That's what I had at first as well, just gibberish. Turned out the logic
> threshold is way too high in the Prologix. Engaging the internal pull-ups
> of the uC in there did the trick.
```

>
> [...]
>
> --
> 73, Joerg

I'm glad you got them to fix it because I ordered a Prologix one yesterday.
I think I should have gotten the Prologix to begin with because I need to
write my own software to do things and the Softmark was not set up for that.

73,
John

432. Re: superregen resonant cavity for narrow band reception - any prior art?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-15 05:29:27 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <b8d41730-5e2e-4aab-877e-87d99b68c941@f1g2000prb.googlegroups.com>
Source record: 3085

On Apr 14, 9:46 am, spamhog <n1...@hotmail.com> wrote:
> As the sunspot cycle is inching forward, I've been considering adding
> an upconverter to Charles Kitchin's 50MHz audio-squelched superregen
> design, in order to make a sensitive and very quickly tuneable
> 15-30MHz receiver intended to take the pulse of propagation on the
> higher HF bands. The idea came from an unpretentious Russian design.
> (No, it wasn't a fremodyne).
>
> In a classic case of mission creep, I observed that a fixed IF lends
> itself to a further step. I searched for prior art in inducing super-
> regeneration in a resonant cavity.
>
> If that could help narrowing the passband, it would be a nice trick
> for upconversion.
>
> I found few and laconic references at almost-otherwordly microwave
> frequencies, Gunn diodes, folded spectra, etc etc.
>
> If I could make a resonant cavity in no time I'd not ask for advice
> before jumping in, but this would be my very first, and shooting for
> 40-60Mz IF it risks being somewhat monumental - short of pigtailing
> the resonator, or doing a folded design, or some other "Grande
> Complication" which might negate the very idea of using a cavity.
>
> ******   Prior art pointers, anyone?   ******
>
> TIA
>
> Filippo N1JPR
>
> --
>
> P.S.: Just to prempt repetitions of the obvious I'll repeat it myself:
> Why don't you use a [superhet ¦ xtal roofing filter ¦ downconversion
> ¦ cod liver oil ¦ snake oil]. Sorry I never heard of it, so it's
> likely to be a bad idea. Are you a Communist? Never heard of a 40MHz
> cavity. A superregen won't demod [CW ¦ SSB ¦ [QM¦P]SKxx ¦ delta-
> sigma ¦ ancient Greek] ! Is this gonna be a portable receiver in
> that you can put it in the back of a SUV - if someone helps you carry
> the 6' long cavity, that is? You will need a [BFO ¦ product detector
> ¦ AMS ¦ DSP ¦ LPF ¦ postprocessing ¦ Photoshop]. IF passband will be
> too broad, although I have no idea how broad since I never used a
> cavity for that. :-o

I think it's the APN141 that uses a gated regen with a cavity. You might get some interesting ideas from it, if you can find any documentation on it. It's a cute design that made me think "out of the box" when I learned it many years ago.

You're talking about a low enough frequency that you'll probably benefit from a calculation of the size of resonator you'll need to get the same Q as you can get from an LC tank. I suspect that unless you are willing to make a really big coaxial resonator, you'll be able to do better with an LC tank, or equivalently a helical resonator. At 1GHz and above, a cavity or coaxial resonator usually makes a lot of sense. At 1MHz, a cavity or coaxial resonator probably never makes sense. At 50MHz---well, do some careful thinking about it before you jump in. A coil a couple inches in diameter and two to four inches long should get you to Qu well in excess of 1000, if you are careful with the construction.

Cheers,
Tom

433. Re: CW connector

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-15 12:07:02 UTC
From: Highland Ham <rfburns@allbands.net>
Message-ID: <XcOdnbYn3LaCbnjUnZ2dnUVZ8tCdnZ2d@pipex.net>
Source record: 3087

David Harmon wrote:
> Is there any particular plug/socket type connector that is an accepted
> standard or most prevalent kind for connecting a CW key to a radio?
>
>
==========
Most (older) radios have a 6.3 mm (1/4 inch) telephone jack socket
either 2 lead or 3 lead (stereo model) when having a built-in keyer.
I also have seen radios with for the Key a RCA audio socket .

Frank GM0CSZ / KN6WH

434. Re: superregen resonant cavity for narrow band reception - any prior art?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-15 13:08:11 UTC
From: "JRCCrabtree@gmail.com" <JRCCrabtree@gmail.com>
Message-ID: <caad68b6-3a3c-42f0-a928-b431f0ba65ed@q2g2000vbr.googlegroups.com>
Source record: 3086

On Apr 14, 11:46 am, spamhog <n1...@hotmail.com> wrote:
> As the sunspot cycle is inching forward, I've been considering adding
> an upconverter to Charles Kitchin's 50MHz audio-squelched superregen
> design, in order to make a sensitive and very quickly tuneable
> 15-30MHz receiver intended to take the pulse of propagation on the
> higher HF bands. The idea came from an unpretentious Russian design.
> (No, it wasn't a fremodyne).
>
> In a classic case of mission creep, I observed that a fixed IF lends
> itself to a further step. I searched for prior art in inducing super-
> regeneration in a resonant cavity.
>
> If that could help narrowing the passband, it would be a nice trick
> for upconversion.
>
> I found few and laconic references at almost-otherwordly microwave
> frequencies, Gunn diodes, folded spectra, etc etc.
>
> If I could make a resonant cavity in no time I'd not ask for advice
> before jumping in, but this would be my very first, and shooting for
> 40-60Mz IF it risks being somewhat monumental - short of pigtailing
> the resonator, or doing a folded design, or some other "Grande
> Complication" which might negate the very idea of using a cavity.
>
> ****** Prior art pointers, anyone? ******
>
> TIA
>
> Filippo N1JPR
>

IIRC N1TEV's design used a sine wave waveform in the quench
oscillator. As such the receiver is slope controlled, in which case
the bandwidth depends upon the rate of change of the admittance across
the tuned circuit as it goes into an oscillation condition, and not
the Q of the resonant circuit.

The standard reference is "Super-Regenerative Receivers", by J.R.
Whitehead, Cambridge University Press, 1950.

73 John KC0G

435. Re: CW connector

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-15 16:11:31 UTC
From: JB <nospam@goofball.net>
Message-ID: <TGnFl.984$b11.740@nwrddc02.gnilink.net>
Source record: 3088

"David Harmon" <source@netcom.com> wrote in message
news:F-qdnRCDEM-qlHjUnZ2dnUVZ_vadnZ2d@earthlink.com...
> Is there any particular plug/socket type connector that is an accepted
> standard or most prevalent kind for connecting a CW key to a radio?
>
Most are 1/4 or more recently 1/8 for straight keys with 3 circuit for
keyers. It varies some. I find it easier to keep the cord with the radio
and use insulated alligator clips and move the favorite key around. This is
the tip for club stations and FD where people bring in their own key.

436. Re: Need help with GPIB on HP 3586

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-15 16:33:53 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <MVnFl.15757$8_3.2939@flpi147.ffdc.sbc.com>
Source record: 3089

```
John KD5YI wrote:
>
> "Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
> news:E77Fl.26956$YU2.4180@nlpi066.nbdc.sbc.com...
>> John KD5YI wrote:
>>> "Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
>>> news:lOREl.23902$c45.16523@nlpi065.nbdc.sbc.com...
>>>> John KD5YI wrote:
>>>>> I have questions like:
>>>>>
>>>>> * The 3586 manual says in one place that the frequency
>>>>> increase/decrease buttons do not function in the remote mode. In
>>>>> the chart of commands, it says that the GPIB command for increase
>>>>> is UP and the GPIB command for decrease is DN. Does anyone know
>>>>> whether these are valid commands or not?
>>>>>
>>>>> * Can anyone provide a step-by-step procedure for the command
>>>>> sequence to read the 3586 signal magnitude using GPIB?
>>>>>
>>>>
>>>> No idea, but why not just try it out? In case you don't have all the
>>>> manuals they can be found here, scroll down about 40%:
>>>>
>>>> http://www.w5jgv.com/amateur_radio.htm
>>>>
>>>>
>>>>> * Which GPIB adaptor do you use?
>>>>>
>>>>
>>>> The Prologix USB. Works fine (after finding a level threshold bug
>>>> and the designer made new firmware for it).
>>>>
>>>> --
>>>> 73, Joerg
>>>
>>> Hi, Joerg -
>>>
>>> I was using a Softmark USB-GPIB unit. Although they responded to
>>> commands, I spent about 20 hours trying to get a reply other than
>>> gibberish from three different instruments with no success. I may
>>> have to roll my own controller, but first I have to understand GPIB.
>>>
>>
>> That's what I had at first as well, just gibberish. Turned out the
```

>> logic threshold is way too high in the Prologix. Engaging the internal
>> pull-ups of the uC in there did the trick.
>>
>> [...]
>>
>> --
>> 73, Joerg
>
>
> I'm glad you got them to fix it because I ordered a Prologix one
> yesterday. I think I should have gotten the Prologix to begin with
> because I need to write my own software to do things and the Softmark
> was not set up for that.
>

If you run into issues and think it's related to the Prologix design
just write to the designer (Abdul). He is very responsive and actually
the firmware you are getting with the new one will reflect the Vt change
he and I found necessary. All others with older versions can just
download the new firmware from the Prologix site.

I guess you've already found this site but just in case others here have
not, this is a great tool set for GPIB:

http://www.thegleam.com/ke5fx/gpib/readme.htm

--
73, Joerg

437. Re: Need help with GPIB on HP 3586

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-15 18:49:18 UTC
From: dplatt@radagast.org
Message-ID: <eqmhb6-cmq.ln1@radagast.org>
Source record: 3090

In article <MVnFl.15757$8_3.2939@flpi147.ffdc.sbc.com>,
Joerg <notthisjoergsch@removethispacbell.net> wrote:

>If you run into issues and think it's related to the Prologix design
>just write to the designer (Abdul). He is very responsive and actually
>the firmware you are getting with the new one will reflect the Vt change
>he and I found necessary. All others with older versions can just
>download the new firmware from the Prologix site.

Except for those of us with the first-generation Prologix product,
alas. It has a different architecture, and (as far as I can tell) no
upgrade path available.

It works reasonably well with my Tek scope, as long as I'm careful
with the command sequences and don't ask the scope to send any data
back in binary mode.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

438. Re: superregen resonant cavity for narrow band reception - any prior art?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-15 19:56:13 UTC
From: "JRCCrabtree@gmail.com" <JRCCrabtree@gmail.com>
Message-ID: <e3f43d4e-4ee5-4952-98cc-2b0fd7cfc101@h28g2000yqd.googlegroups.com>
Source record: 3091

On Apr 15, 8:08 am, "JRCCrabt...@gmail.com" <JRCCrabt...@gmail.com>
wrote:
> On Apr 14, 11:46 am, spamhog <n1...@hotmail.com> wrote:
> >
> > As the sunspot cycle is inching forward, I've been considering adding
> > an upconverter to Charles Kitchin's 50MHz audio-squelched superregen
> > design, in order to make a sensitive and very quickly tuneable
> > 15-30MHz receiver intended to take the pulse of propagation on the
> > higher HF bands. The idea came from an unpretentious Russian design.
> > (No, it wasn't a fremodyne).
>
> > In a classic case of mission creep, I observed that a fixed IF lends
> > itself to a further step. I searched for prior art in inducing super-
> > regeneration in a resonant cavity.
>
> > If that could help narrowing the passband, it would be a nice trick
> > for upconversion.
>
> > I found few and laconic references at almost-otherwordly microwave
> > frequencies, Gunn diodes, folded spectra, etc etc.
>
> > If I could make a resonant cavity in no time I'd not ask for advice
> > before jumping in, but this would be my very first, and shooting for
> > 40-60Mz IF it risks being somewhat monumental - short of pigtailing
> > the resonator, or doing a folded design, or some other "Grande
> > Complication" which might negate the very idea of using a cavity.
>
> > ****** Prior art pointers, anyone? ******
>
> > TIA
>
> > Filippo N1JPR
>
> IIRC N1TEV's design used a sine wave waveform in the quench
> oscillator. As such the receiver is slope controlled, in which case
> the bandwidth depends upon the rate of change of the admittance across
> the tuned circuit as it goes into an oscillation condition, and not
> the Q of the resonant circuit.
>
> The standard reference is "Super-Regenerative Receivers", by J.R.
> Whitehead, Cambridge University Press, 1950.
>
> 73 John KC0G-

I meant to say "conductance" not "admittance"

439. Re: Need help with GPIB on HP 3586

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-16 03:50:59 UTC
From: John KD5YI <groups2_dot_jocjo@xoxy.net>
Message-ID: <DWxFl.381$N5.158@nwrddc01.gnilink.net>
Source record: 3092

```
"Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
news:MVnFl.15757$8_3.2939@flpi147.ffdc.sbc.com...
> John KD5YI wrote:
>>
>> "Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
>> news:E77Fl.26956$YU2.4180@nlpi066.nbdc.sbc.com...
>>> John KD5YI wrote:
>>>> "Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
>>>> news:lOREl.23902$c45.16523@nlpi065.nbdc.sbc.com...
>>>>> John KD5YI wrote:
>>>>>> I have questions like:
>>>>>>
>>>>>> * The 3586 manual says in one place that the frequency
>>>>>> increase/decrease buttons do not function in the remote mode. In the
>>>>>> chart of commands, it says that the GPIB command for increase is UP
>>>>>> and the GPIB command for decrease is DN. Does anyone know whether
>>>>>> these are valid commands or not?
>>>>>>
>>>>>> * Can anyone provide a step-by-step procedure for the command
>>>>>> sequence to read the 3586 signal magnitude using GPIB?
>>>>>>
>>>>>
>>>>> No idea, but why not just try it out? In case you don't have all the
>>>>> manuals they can be found here, scroll down about 40%:
>>>>>
>>>>> http://www.w5jgv.com/amateur_radio.htm
>>>>>
>>>>>
>>>>>> * Which GPIB adaptor do you use?
>>>>>>
>>>>>
>>>>> The Prologix USB. Works fine (after finding a level threshold bug and
>>>>> the designer made new firmware for it).
>>>>>
>>>>> --
>>>>> 73, Joerg
>>>>
>>>> Hi, Joerg -
>>>>
>>>> I was using a Softmark USB-GPIB unit. Although they responded to
>>>> commands, I spent about 20 hours trying to get a reply other than
>>>> gibberish from three different instruments with no success. I may have
>>>> to roll my own controller, but first I have to understand GPIB.
>>>>
```

>>>
>>> That's what I had at first as well, just gibberish. Turned out the logic
>>> threshold is way too high in the Prologix. Engaging the internal
>>> pull-ups of the uC in there did the trick.
>>>
>>> [...]
>>>
>>> --
>>> 73, Joerg
>>
>>
>> I'm glad you got them to fix it because I ordered a Prologix one
>> yesterday. I think I should have gotten the Prologix to begin with
>> because I need to write my own software to do things and the Softmark was
>> not set up for that.
>>
>
> If you run into issues and think it's related to the Prologix design just
> write to the designer (Abdul). He is very responsive and actually the
> firmware you are getting with the new one will reflect the Vt change he
> and I found necessary. All others with older versions can just download
> the new firmware from the Prologix site.
>
> I guess you've already found this site but just in case others here have
> not, this is a great tool set for GPIB:
>
> http://www.thegleam.com/ke5fx/gpib/readme.htm
>
> --
> 73, Joerg

I got it today and it works very well. I had it talking and listening to all
three of the GPIB-capable instruments I have in less than an hour.

Thanks for the link.

73,
John

440. Re: Need help with GPIB on HP 3586

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-16 15:00:15 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <7KHFl.4995$im1.1689@nlpi061.nbdc.sbc.com>
Source record: 3093

```
John KD5YI wrote:
>
> "Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
> news:MVnFl.15757$8_3.2939@flpi147.ffdc.sbc.com...
>> John KD5YI wrote:
>>>
>>> "Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
>>> news:E77Fl.26956$YU2.4180@nlpi066.nbdc.sbc.com...
>>>> John KD5YI wrote:
>>>>> "Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
>>>>> news:lOREl.23902$c45.16523@nlpi065.nbdc.sbc.com...
>>>>>> John KD5YI wrote:
>>>>>>> I have questions like:
>>>>>>>
>>>>>>> * The 3586 manual says in one place that the frequency
>>>>>>> increase/decrease buttons do not function in the remote mode. In
>>>>>>> the chart of commands, it says that the GPIB command for increase
>>>>>>> is UP and the GPIB command for decrease is DN. Does anyone know
>>>>>>> whether these are valid commands or not?
>>>>>>>
>>>>>>> * Can anyone provide a step-by-step procedure for the command
>>>>>>> sequence to read the 3586 signal magnitude using GPIB?
>>>>>>>
>>>>>>
>>>>>> No idea, but why not just try it out? In case you don't have all
>>>>>> the manuals they can be found here, scroll down about 40%:
>>>>>>
>>>>>> http://www.w5jgv.com/amateur_radio.htm
>>>>>>
>>>>>>
>>>>>>> * Which GPIB adaptor do you use?
>>>>>>>
>>>>>>
>>>>>> The Prologix USB. Works fine (after finding a level threshold bug
>>>>>> and the designer made new firmware for it).
>>>>>>
>>>>>> --
>>>>>> 73, Joerg
>>>>>
>>>>> Hi, Joerg -
>>>>>
>>>>> I was using a Softmark USB-GPIB unit. Although they responded to
>>>>> commands, I spent about 20 hours trying to get a reply other than
>>>>> gibberish from three different instruments with no success. I may
```

>>>>> have to roll my own controller, but first I have to understand GPIB.
>>>>>
>>>>
>>>> That's what I had at first as well, just gibberish. Turned out the
>>>> logic threshold is way too high in the Prologix. Engaging the
>>>> internal pull-ups of the uC in there did the trick.
>>>>
>>>> [...]
>>>>
>>>> --
>>>> 73, Joerg
>>>
>>>
>>> I'm glad you got them to fix it because I ordered a Prologix one
>>> yesterday. I think I should have gotten the Prologix to begin with
>>> because I need to write my own software to do things and the Softmark
>>> was not set up for that.
>>>
>>
>> If you run into issues and think it's related to the Prologix design
>> just write to the designer (Abdul). He is very responsive and actually
>> the firmware you are getting with the new one will reflect the Vt
>> change he and I found necessary. All others with older versions can
>> just download the new firmware from the Prologix site.
>>
>> I guess you've already found this site but just in case others here
>> have not, this is a great tool set for GPIB:
>>
>> http://www.thegleam.com/ke5fx/gpib/readme.htm
>>
>> --
>> 73, Joerg
>
>
> I got it today and it works very well. I had it talking and listening to
> all three of the GPIB-capable instruments I have in less than an hour.
>
> Thanks for the link.
>

Great! Yours is probably screaming-yellow, mine's the now ancient silver
version. I still have to make angles for the GPIB side from Digikey
connectors and some ribbon cable. The Prologix plus USB cable sticks out
too much towards the back, easy to crush when moving an older analyzer.

--
73, Joerg

441. Re: superregen resonant cavity for narrow band reception - any prior art?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-16 15:42:09 UTC
From: spamhog <n1jpr@hotmail.com>
Message-ID: <f129ec65-b488-47a4-a8d4-fac4b0c3b766@h28g2000yqd.googlegroups.com>
Source record: 3094

Tim, Tom, Jimmie, John, thanks you all! This thing might work, There's no way around the need to get my feet wet and build/find some cavity.

Filippo N1JPR

442. Re: superregen resonant cavity for narrow band reception - any prior art?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-16 16:14:51 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <eb7761ed-69db-41c8-9088-4b80aa6a0161@f19g2000yqh.googlegroups.com>
Source record: 3095

On Apr 15, 9:08 am, "JRCCrabt...@gmail.com" <JRCCrabt...@gmail.com>
wrote:
> On Apr 14, 11:46 am, spamhog <n1...@hotmail.com> wrote:
>
>
>
>
>
> > As the sunspot cycle is inching forward, I've been considering adding
> > an upconverter to Charles Kitchin's 50MHz audio-squelched superregen
> > design, in order to make a sensitive and very quickly tuneable
> > 15-30MHz receiver intended to take the pulse of propagation on the
> > higher HF bands. The idea came from an unpretentious Russian design.
> > (No, it wasn't a fremodyne).
>
> > In a classic case of mission creep, I observed that a fixed IF lends
> > itself to a further step. I searched for prior art in inducing super-
> > regeneration in a resonant cavity.
>
> > If that could help narrowing the passband, it would be a nice trick
> > for upconversion.
>
> > I found few and laconic references at almost-otherwordly microwave
> > frequencies, Gunn diodes, folded spectra, etc etc.
>
> > If I could make a resonant cavity in no time I'd not ask for advice
> > before jumping in, but this would be my very first, and shooting for
> > 40-60Mz IF it risks being somewhat monumental - short of pigtailing
> > the resonator, or doing a folded design, or some other "Grande
> > Complication" which might negate the very idea of using a cavity.
>
> > ****** Prior art pointers, anyone? ******
>
> > TIA
>
> > Filippo N1JPR
>
> IIRC N1TEV's design used a sine wave waveform in the quench
> oscillator. As such the receiver is slope controlled, in which case
> the bandwidth depends upon the rate of change of the admittance across
> the tuned circuit as it goes into an oscillation condition, and not
> the Q of the resonant circuit.
>
> The standard reference is "Super-Regenerative Receivers", by J.R.

> Whitehead, Cambridge University Press, 1950.
>
> 73 John KC0G- Hide quoted text -
>
> - Show quoted text -

Initially I thought the OP was going to incorporate the very high Q resonant circuit in his converter , to me that would be the logical thing to do, then I re-read it. Of course you are correct. I can greatly appreciate that the OP wants to do things his way just because thats the way he wants to do it. Given the complexity of the circuit he is going to eventually have I think he should just build a little superhet for his purposes.

Jimmie

443. Re: superregen resonant cavity for narrow band reception - any prior art?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-16 18:54:15 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <e3067d97-4db6-4249-871b-0ff8138d4517@s21g2000vbb.googlegroups.com>
Source record: 3096

On Apr 16, 8:42 am, spamhog <n1...@hotmail.com> wrote:
> Tim, Tom, Jimmie, John, thanks you all! This thing might work, There's
> no way around the need to get my feet wet and build/find some cavity.
>
> Filippo N1JPR

Further to my comment about how big a coaxial resonator must be to get high Q: to get Qu of 1000 at 50MHz will require an air-dielectric line almost 1.5 inches OD. A quarter wavelength is about 60 inches; you can shorten that some by loading the open end with capacitance, but expect it will be at least half that long. Compare that with a coil of 8 turns of #10 AWG copper wire 1.25 inches ID, spaced 2 wire diameters center-to-center (less than 2 inches total length) that will also give you a Qu over 1000.

I think if I had an overwhelming urge to try a design using a cavity (or coaxial cavity) resonator, I'd do it at about 1GHz, or maybe even 500MHz, where I can make a resonator with high Qu in a practical size, and where I can't wind a coil that's big enough to get really high Q and also have a high self resonant frequency. For example, at 1GHz, a quarter wave air dielectric cavity will be about 3 inches long, and if I make it from "3/4-inch" copper pipe (properly cleaned), I can get Qu well over 2000; it will be very tough to make a coil that has a self-resonance above 1GHz that has a Qu even close to 1000 (short of using superconducting wire!).

There are very practical reasons that you don't see cavity resonators at low frequencies: you can do better with smaller, cheaper parts.

Cheers,
Tom

444. Re: CW connector

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-16 20:17:31 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <287b1174-0625-4660-8320-556f067ed696@s20g2000yqh.googlegroups.com>
Source record: 3097

On Apr 14, 6:07 pm, David Harmon <sou...@netcom.com> wrote:
> Is there any particular plug/socket type connector that is an accepted
> standard or most prevalent kind for connecting a CW key to a radio?

Quarter inch phone plug is most common on equipment from the 50's,
60's, 70's. A few use a phono (RCA) plug.

A lot of recent equipment has an 1/8" stereo jack that allows you to
use an iambic paddle on the rig's built in keyer.

There have in the past few months been a couple of QST reviews of
paddles and portable paddles where, for some bizarre reason, the
reviewer assumed that a typical user was incapable of wiring the
connecting plug or correcting the wiring if left and right was
reversed. I thought this was a little odd, but maybe a lot of newbie
hams really cannot wire a plug. I will admit that the cheapie plugs
and jacks from Radio Shack, Mouser, etc., are pretty crappy and melt
the insulator if you are too heavy handed with a soldering gun. The
Switchcraft plugs and jacks (a lot more money than the cheap stuff!)
are a joy to work with.

Tim.

445. Re: CW connector

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-17 01:55:49 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <8187339e-bd55-466b-a4e0-30da711f1e72@h2g2000yqg.googlegroups.com>
Source record: 3098

On Apr 16, 1:17 pm, Tim Shoppa <sho...@trailing-edge.com> wrote:
> On Apr 14, 6:07 pm, David Harmon <sou...@netcom.com> wrote:
>
> > Is there any particular plug/socket type connector that is an accepted
> > standard or most prevalent kind for connecting a CW key to a radio?
>
> Quarter inch phone plug is most common on equipment from the 50's,
> 60's, 70's. A few use a phono (RCA) plug.
>
> A lot of recent equipment has an 1/8" stereo jack that allows you to
> use an iambic paddle on the rig's built in keyer.
>
> There have in the past few months been a couple of QST reviews of
> paddles and portable paddles where, for some bizarre reason, the
> reviewer assumed that a typical user was incapable of wiring the
> connecting plug or correcting the wiring if left and right was
> reversed. I thought this was a little odd, but maybe a lot of newbie
> hams really cannot wire a plug. I will admit that the cheapie plugs
> and jacks from Radio Shack, Mouser, etc., are pretty crappy and melt
> the insulator if you are too heavy handed with a soldering gun. The
> Switchcraft plugs and jacks (a lot more money than the cheap stuff!)
> are a joy to work with.
>
> Tim.

Which is not to say that Mouser ONLY carries "cheapie" plugs and
jacks. They are a Deltron distributor, and Deltron makes some really
fine parts. For one of their 1/4" phone plugs, see
http://www.dem-uk.com/DEM_PDFs/326.pdf. I've been using Deltron XLR
connectors for over 10 years, and find they are a real joy to assemble
and to use, and have held up extremely well in a professional audio
environment. The XLRs beat the Switchcrafts hands down, and I
personally like them better than Neutrik. But their over $10 each
price for 1/4" phone plugs probably isn't for everyone. ;-) (Mouser
also sells Switchcraft...)

Cheers,
Tom

446. Re: nixie driver

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-17 16:38:01 UTC
From: LAB <no@mail.com>
Message-ID: <gsab8rifa1@serv1.iunet.it>
Source record: 3099

You can find K155ID1 here for 1.50USD:
http://www.tubehobby.com/show_det.php?det=34

--
Gianluca

447. Looking for M67715 PA Module

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-19 03:38:50 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <69CdnYFqo8lXAXfUnZ2dnUVZ_qadnZ2d@bright.net>
Source record: 3100

Anyone have a new one for sale? My usual supplier (RF Parts) says they
are all gone. Need one for my 1296 transverter project.

Scott, N0EDV
http://shop.ebay.com/merchant/jracepilot_W0QQ_dmdZ1QQ_in_kwZ1QQ_ipgZ50QQ_sopZ12?_rdc=1

448. Re: nixie driver

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-19 04:54:45 UTC
From: "sdswartz@comcast.net" <sdswartz@comcast.net>
Message-ID: <bda18c0b-6475-471c-b316-648508318c10@q16g2000yqg.googlegroups.com>
Source record: 2951

On Apr 17, 12:38 pm, "LAB" <n...@mail.com> wrote:
> You can find K155ID1 here for 1.50USD:http://www.tubehobby.com/show_det.php?det=34
>
> --
> Gianluca

Maybe it is a little un-cool for me to mention this but there is an
entire yahoo group devoted to all things nixie including tubes drivers
parts procurement circuit s etc.

Steve

449. Re: Looking for M67715 PA Module

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-19 14:00:09 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <J7GGl.28768$j7.491748@news.indigo.ie>
Source record: 2952

On Sun, 19 Apr 2009 03:38:50 +0000, Scott wrote:

> Anyone have a new one for sale? My usual supplier (RF Parts) says they
> are all gone. Need one for my 1296 transverter project.
>
> Scott, N0EDV
> http://shop.ebay.com/merchant/
jracepilot_W0QQ_dmdZ1QQ_in_kwZ1QQ_ipgZ50QQ_sopZ12?_rdc=1

Barend Hendrikson seem to have them in stock.
Not cheap!

http://www.xs4all.nl/~barendh/Indexeng.htm

--
Remove 'X' to reply by e-mail.
Linux-2.6.26

450. Re: Looking for M67715 PA Module

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-19 14:23:13 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <coSdnSMekaZMrnbUnZ2dnUVZ_v6dnZ2d@bright.net>
Source record: 2953

OEamon Skelton wrote:
> On Sun, 19 Apr 2009 03:38:50 +0000, Scott wrote:
>
>> Anyone have a new one for sale? My usual supplier (RF Parts) says they
>> are all gone. Need one for my 1296 transverter project.
>>
>> Scott, N0EDV
>> http://shop.ebay.com/merchant/jracepilot_W0QQ_dmdZ1QQ_in_kwZ1QQ_ipgZ50QQ_sopZ12?_rdc=1
>
>
> Barend Hendrikson seem to have them in stock.
> Not cheap!
>
> http://www.xs4all.nl/~barendh/Indexeng.htm
>
>
>
>
>

Ouch. VERY ouch. Guess I'll have to look at one of the MOSFET "RA"
modules....

Thanks for the link though!

451. Re: nixie driver

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-19 18:00:56 UTC
From: "Bruce W. Ellis" <ellis@means.net>
Message-ID: <35fvt41qqila7fmq29hdst7b4baj9kknqm@4ax.com>
Source record: 2954

On Wed, 8 Apr 2009 06:51:53 -0700 (PDT), Tim Shoppa
<shoppa@trailing-edge.com> wrote:

>On Apr 3, 10:34ï¿½am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
>> I have a Systron Donner frequency counter that uses Nixie tubes. The
>> counter works fine but I am forever replacing the Nixie drivers
>> 74141s. I started to use it this AM an one was out. Is there a
>> replacement for the 74141, I couldnt find one, or is there a circuit I
>> could build on a DIP header to replace them. I could probably design
>> one but I wanted something tried an tested as I dont want to put my
>> counter board at more risk than I have to.
>
>Domestic 74141's are hard to find these days but on E-bay the Russian
>equivalent is very common.
>
>Yes, you could build just about anything with a one-of-ten decoder and
>some current-sink drivers to do the same.
>
>If the goal isn't nixie tubes but is a working frequency counter, you
>could probably put the counter up on E-bay for somebody who wants
>nixie tubes, and use the money to buy several superior frequency
>counters.
>
>Tim N3QE

Just remember to cut down on the voltage and current to the nixie
tubes and the 141s will last forever...

Bruce W0BF

452. Re: nixie driver

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-19 19:13:13 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <7706b893-51ae-433c-a5ac-89a22df83350@x6g2000vbg.googlegroups.com>
Source record: 2955

On Apr 19, 2:00 pm, Bruce W. Ellis <el...@means.net> wrote:
> On Wed, 8 Apr 2009 06:51:53 -0700 (PDT), Tim Shoppa
>
>
>
>
>
> <sho...@trailing-edge.com> wrote:
> >On Apr 3, 10:34 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> >> I have a Systron Donner frequency counter that uses Nixie tubes. The
> >> counter works fine but I am forever replacing the Nixie drivers
> >> 74141s. I started to use it this AM an one was out. Is there a
> >> replacement for the 74141, I couldnt find one, or is there a circuit I
> >> could build on a DIP header to replace them. I could probably design
> >> one but I wanted something tried an tested as I dont want to put my
> >> counter board at more risk than I have to.
>
> >Domestic 74141's are hard to find these days but on E-bay the Russian
> >equivalent is very common.
>
> >Yes, you could build just about anything with a one-of-ten decoder and
> >some current-sink drivers to do the same.
>
> >If the goal isn't nixie tubes but is a working frequency counter, you
> >could probably put the counter up on E-bay for somebody who wants
> >nixie tubes, and use the money to buy several superior frequency
> >counters.
>
> >Tim N3QE
>
> Just remember to cut down on the voltage and current to the nixie
> tubes and the 141s will last forever...
>
> Bruce W0BF- Hide quoted text -
>
> - Show quoted text -

Thanks all for the input. I managed to cut the voltage back from about 210VDC to 185VDC and the display still looks good, the change in brightness was barely discernable. It may take a while to see if this helped. What voltage do you normally run on nixies. I wish I had more data on the nixies but I dont have a part number.

Jimmie

453. Re: Looking for M67715 PA Module

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-19 22:37:01 UTC
From: "Geert Jan de Groot"
Message-ID: <49eba78d$0$189$e4fe514c@news.xs4all.nl>
Source record: 2956

>>> Anyone have a new one for sale? My usual supplier (RF Parts) says they
>>> are all gone. Need one for my 1296 transverter project.
>> Barend Hendrikson seem to have them in stock.
>> Not cheap!
> Ouch. VERY ouch. Guess I'll have to look at one of the MOSFET "RA"
> modules....

67715's have been out of production for a number of years now,
because their MOSFET counterparts are better: more linear,
higher gain, more efficient.

I realize it hurts when you can't just plunk in a part but
in the end you'll feel better, honest..

73,

Geert Jan PE1HZG

454. Re: Looking for M67715 PA Module

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 10:20:50 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <oP6dnSSkwOkb0XHUnZ2dnUVZ_sWdnZ2d@bright.net>
Source record: 2957

Geert Jan de Groot wrote:

>
> 67715's have been out of production for a number of years now,
> because their MOSFET counterparts are better: more linear,
> higher gain, more efficient.
>
> I realize it hurts when you can't just plunk in a part but
> in the end you'll feel better, honest..
>
> 73,
>
> Geert Jan PE1HZG
>
>

I think we are possibly talking about different MOSFET modules. The one I specifically refer to for use at 1240-1300 MHz (RA181213G). The data sheet says it is designed for FM (NON-linear) but can be set up for linear use by setting Id with Vgg and controlling the output level with the input (RF) level. http://www.rfparts.com/pdf_docs/RA/RA18H1213G.pdf

It should work...it will just require a few additional components.

Scott
N0EDV

455. Re: CW connector

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 15:20:01 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <e90e55ca-2bd9-483d-82c3-91f3658adeb5@b1g2000vbc.googlegroups.com>
Source record: 2958

On Apr 16, 9:55 pm, K7ITM <k7...@msn.com> wrote:
> On Apr 16, 1:17 pm, Tim Shoppa <sho...@trailing-edge.com> wrote:
>
>
>
>
>
> > On Apr 14, 6:07 pm, David Harmon <sou...@netcom.com> wrote:
>
> > > Is there any particular plug/socket type connector that is an accepted
> > > standard or most prevalent kind for connecting a CW key to a radio?
>
> > Quarter inch phone plug is most common on equipment from the 50's,
> > 60's, 70's. A few use a phono (RCA) plug.
>
> > A lot of recent equipment has an 1/8" stereo jack that allows you to
> > use an iambic paddle on the rig's built in keyer.
>
> > There have in the past few months been a couple of QST reviews of
> > paddles and portable paddles where, for some bizarre reason, the
> > reviewer assumed that a typical user was incapable of wiring the
> > connecting plug or correcting the wiring if left and right was
> > reversed. I thought this was a little odd, but maybe a lot of newbie
> > hams really cannot wire a plug. I will admit that the cheapie plugs
> > and jacks from Radio Shack, Mouser, etc., are pretty crappy and melt
> > the insulator if you are too heavy handed with a soldering gun. The
> > Switchcraft plugs and jacks (a lot more money than the cheap stuff!)
> > are a joy to work with.
>
> > Tim.
>
> Which is not to say that Mouser ONLY carries "cheapie" plugs and
> jacks. They are a Deltron distributor, and Deltron makes some really
> fine parts. For one of their 1/4" phone plugs,
seehttp://www.dem-uk.com/DEM_PDFs/326.pdf. I've been using Deltron XLR
> connectors for over 10 years, and find they are a real joy to assemble
> and to use, and have held up extremely well in a professional audio
> environment. The XLRs beat the Switchcrafts hands down, and I
> personally like them better than Neutrik. But their over $10 each
> price for 1/4" phone plugs probably isn't for everyone. ;-) (Mouser
> also sells Switchcraft...)

I also like the Neutrik's but at least with the connectors I've seen,
the insulators are thermosetting plastics that can melt under

soldering temperatures.

One of my pet peeves (extending back to polystyrene coil forms in my childhood) is that I really really hate it when plastic starts melting when I use a soldering iron in a fairly normal fashion. I will admit that there are special cases where extra precautins must be taken, and I will admit that sometimes I may be a little heavy handed with my WTCPT (which is temperature regulated).

But I can also see a newbie (like maybe that QST reviewer) using a non-regulated-temperature soldering iron and getting frustrated with soldering simple connectors.

I really really like the Switchcrafts for their solid feel and unmeltable insulators. I admit that Neutrik et al are pretty good too, and I can put myself in the mindset of "be careful, don't melt it!" when I use them, but I just adore the Switchcrafts.

Radio Shack and Mouser have some other brands at differing price points and differing gold plating but I honestly have little to no feel for where they fall on actual usability. With any brand other than Switchcraft, I always have the fear that I'll pay extra money and end up with cheap crap. With Switchcrafts, I know that I'll pay the extra money but also know I'll never end up with cheap crap.

I do like some of the other Deltron-branded stuff from Mouser, especially their chassis punches.

Tim N3QE

456. Re: CW connector

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 15:39:07 UTC
From: sorry-spammers <"w9wi\\@(sorry-spammers)">
Message-ID: <Yt-dnWIRwYCiCnHUnZ2dnUVZ_qCdnZ2d@earthlink.com>
Source record: 2959

Tim Shoppa wrote:
> I also like the Neutrik's but at least with the connectors I've seen,
> the insulators are thermosetting plastics that can melt under
> soldering temperatures.

This came up on one of the broadcasting groups a few weeks ago.

I suppose use of XLR connectors is rare in amateur radio but...

I've had problems with Neutrik connectors. On the cable connectors, I've had problems with the strain relief mechanisms breaking. On brand new ones, if you try to tighten them too tight. ("too tight" is to easy to achieve) On ones that have been in service for awhile, they seem to break with less abuse than Switchcraft. (in a field environment they WILL be abused)

On the chassis connectors, at least they used to use "pot metal" for the frame - and the frames would break. We made the mistake of using some for a side connector panel on a live truck, and within a few months they'd managed to push several connectors all the way through the panel.

They're probably OK when used in a situation where they won't be touched very often.

I share the disgust for connectors that melt when soldered in a normal fashion. Haven't had much trouble with that on 1/4" connectors but some on 1/8" and a LOT on RCA connectors.

--

Doug Smith W9WI
Pleasant View, TN EM66

457. If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 16:50:05 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <aeb0ddac-6f08-4d5b-8463-ad34a71e27de@p11g2000yqe.googlegroups.com>
Source record: 2960
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

A terminology question I suppose about the derivation of the term
"Superheterodyne" more than anything else:

Does the "Super" actually mean anything? Is there a Subheterodyne?

Traditionally superhets mix a higher radio frequency down to a lower
IF frequency, but certainly in the past few decades radios with IF's
above the RF frequency have become very common in broadband
applications, and those are still called superhets, not subhets :-).

Google turns up a couple hits on subheterodyne but other than one that
might mean "IF higher in frequency than RF" I don't recognize what
they mean..

I suspect that "Super" was more a marketing term than anything
else :-).

Tim N3QE

458. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 17:01:22 UTC
From: Bert Hyman <bert@iphouse.com>
Message-ID: <Xns9BF37A18D3745VeebleFetzer@216.250.184.7>
Source record: 2961
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

In
news:aeb0ddac-6f08-4d5b-8463-ad34a71e27de@p11g2000yqe.googlegroups.com
Tim Shoppa <shoppa@trailing-edge.com> wrote:

> A terminology question I suppose about the derivation of the term
> "Superheterodyne" more than anything else:
>
> Does the "Super" actually mean anything?

My recollection is that Armstrong used the term "supersonic heterodyne"
to note the fact that the beat frequency between the signal and LO
was "supersonic."

--
Bert Hyman St. Paul, MN bert@iphouse.com

459. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 17:09:26 UTC
From: Jean-Christophe <5.d@free.fr>
Message-ID: <9fc4e2d5-f652-4719-b3d9-4a0edb0b5451@y9g2000yqg.googlegroups.com>
Source record: 2962
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Apr 20, 5:50 pm, Tim Shoppa <sho...@trailing-edge.com> wrote:
> A terminology question I suppose about the derivation of the term
> "Superheterodyne" more than anything else:
>
> Does the "Super" actually mean anything? Is there a Subheterodyne?
> Traditionally superhets mix a higher radio frequency down to a lower
> IF frequency, but certainly in the past few decades radios with IF's
> above the RF frequency have become very common in broadband
> applications, and those are still called superhets, not subhets :-).
> Google turns up a couple hits on subheterodyne but other than one that
> might mean "IF higher in frequency than RF" I don't recognize what
> they mean..

A superheterodyne can be Supradyne or Infradyne,
depending of the IF against the RF.

> I suspect that "Super" was more a marketing term than anything
> else :-).

I don't superthink so.

460. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 17:10:48 UTC
From: John Larkin <jjSNIPlarkin@highTHISlandtechnology.com>
Message-ID: <cuapu493arqnk5disoe9p66dqlhtmp56t2@4ax.com>
Source record: 2963
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Mon, 20 Apr 2009 09:50:05 -0700 (PDT), Tim Shoppa
<shoppa@trailing-edge.com> wrote:

>A terminology question I suppose about the derivation of the term
>"Superheterodyne" more than anything else:
>
>Does the "Super" actually mean anything? Is there a Subheterodyne?
>
>Traditionally superhets mix a higher radio frequency down to a lower
>IF frequency, but certainly in the past few decades radios with IF's
>above the RF frequency have become very common in broadband
>applications, and those are still called superhets, not subhets :-).
>
>Google turns up a couple hits on subheterodyne but other than one that
>might mean "IF higher in frequency than RF" I don't recognize what
>they mean..
>
>I suspect that "Super" was more a marketing term than anything
>else :-).
>
>Tim N3QE

Supersonic.

http://en.wikipedia.org/wiki/Superheterodyne_receiver

John

461. XTAL Radio Receiver Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 18:34:49 UTC
From: David <DavidBR549@gmail.com>
Message-ID: <5caa0a68-500d-4d9d-b9e4-8a1dc295fa74@z19g2000vbz.googlegroups.com>
Source record: 2964

Looking for Crystal Radio Receiver Circuits, that have a voltage
quadrupler to increase headphone volume without batteries or AC power.

462. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 19:23:53 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <64d06f97-d4a2-4917-a0cc-d79f91d3a428@m19g2000yqk.googlegroups.com>
Source record: 2967
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Apr 20, 1:10 pm, John Larkin
<jjSNIPlar...@highTHISlandtechnology.com> wrote:
> On Mon, 20 Apr 2009 09:50:05 -0700 (PDT), Tim Shoppa
>
>
>
>
>
> <sho...@trailing-edge.com> wrote:
> >A terminology question I suppose about the derivation of the term
> >"Superheterodyne" more than anything else:
>
> >Does the "Super" actually mean anything? Is there a Subheterodyne?
>
> >Traditionally superhets mix a higher radio frequency down to a lower
> >IF frequency, but certainly in the past few decades radios with IF's
> >above the RF frequency have become very common in broadband
> >applications, and those are still called superhets, not subhets :-).
>
> >Google turns up a couple hits on subheterodyne but other than one that
> >might mean "IF higher in frequency than RF" I don't recognize what
> >they mean..
>
> >I suspect that "Super" was more a marketing term than anything
> >else :-).
>
> >Tim N3QE
>
> Supersonic.
>
> http://en.wikipedia.org/wiki/Superheterodyne_receiver

I saw that in Wikipedia too. I didn't believe it, it doesn't make
sense. Why not just call all radio frequencies and IF frequencies
above 20kHz "supersonic"? Then all radios (*) are supersonic, and
we're back to super meaning nothing at all.

(*) OK, I know about lowfers and there is submarine RF communication
below 20kHz. If I listen in to that with a superhet is it then really
a subhet?

Reminds me of a Simpsons episode where Bart and Homer are arguing
about something, and Bart parrots what Wikipedia says on the subject.
Homer says in a deep resentful voice "We'll fix THAT when we get

home!"

Tim.

463. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 19:36:12 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <M84Hl.25054$Ws1.15748@nlpi064.nbdc.sbc.com>
Source record: 2968
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Tim Shoppa wrote:
> A terminology question I suppose about the derivation of the term
> "Superheterodyne" more than anything else:
>
> Does the "Super" actually mean anything? Is there a Subheterodyne?
>
> Traditionally superhets mix a higher radio frequency down to a lower
> IF frequency, but certainly in the past few decades radios with IF's
> above the RF frequency have become very common in broadband
> applications, and those are still called superhets, not subhets :-).
>
> Google turns up a couple hits on subheterodyne but other than one that
> might mean "IF higher in frequency than RF" I don't recognize what
> they mean..
>
> I suspect that "Super" was more a marketing term than anything
> else :-).
>

If you want to file a new patent for old stuff you could try
subheterodyne and it just might sail through :-)

Oh wait, call it hyperheterodyne, has more glitz. Just like the
supermercados in Spain.

--
Regards, Joerg

http://www.analogconsultants.com/

"gmail" domain blocked because of excessive spam.
Use another domain or send PM.

464. Re: Looking for M67715 PA Module

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 19:36:55 UTC
From: Highland Ham <rfburns@allbands.net>
Message-ID: <-8qdnccp9pMnXXHUnZ2dnUVZ8g-dnZ2d@pipex.net>
Source record: 2965

Eamon Skelton wrote:
> On Sun, 19 Apr 2009 03:38:50 +0000, Scott wrote:
>
>> Anyone have a new one for sale? My usual supplier (RF Parts) says they
>> are all gone. Need one for my 1296 transverter project.
>>
>> Scott, N0EDV
>> http://shop.ebay.com/merchant/
> jracepilot_W0QQ_dmdZ1QQ_in_kwZ1QQ_ipgZ50QQ_sopZ12?_rdc=1
>
>
> Barend Hendrikson seem to have them in stock.
> Not cheap!
>
> http://www.xs4all.nl/~barendh/Indexeng.htm
==========
Another possible source is Mainline Electronics : PO Box 235
Leicester LE2 9SH - England ,UK
tel : +44 116 277 7648 ; Fax +44 116 247 7551
http://mainline-group.com/

They also have a 'surplus department'

Frank GM0CSZ / KN6WH

465. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 19:44:12 UTC
From: John Larkin <jjSNIPlarkin@highTHISlandtechnology.com>
Message-ID: <q2kpu4dsupiopinf8qjuoi9o2thqgvr0mr@4ax.com>
Source record: 2969
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Mon, 20 Apr 2009 12:23:53 -0700 (PDT), Tim Shoppa
<shoppa@trailing-edge.com> wrote:

>On Apr 20, 1:10ï¿½pm, John Larkin
><jjSNIPlar...@highTHISlandtechnology.com> wrote:
>> On Mon, 20 Apr 2009 09:50:05 -0700 (PDT), Tim Shoppa
>>
>>
>>
>>
>>
>> <sho...@trailing-edge.com> wrote:
>> >A terminology question I suppose about the derivation of the term
>> >"Superheterodyne" more than anything else:
>>
>> >Does the "Super" actually mean anything? Is there a Subheterodyne?
>>
>> >Traditionally superhets mix a higher radio frequency down to a lower
>> >IF frequency, but certainly in the past few decades radios with IF's
>> >above the RF frequency have become very common in broadband
>> >applications, and those are still called superhets, not subhets :-).
>>
>> >Google turns up a couple hits on subheterodyne but other than one that
>> >might mean "IF higher in frequency than RF" I don't recognize what
>> >they mean..
>>
>> >I suspect that "Super" was more a marketing term than anything
>> >else :-).
>>
>> >Tim N3QE
>>
>> Supersonic.
>>
>> http://en.wikipedia.org/wiki/Superheterodyne_receiver
>
>I saw that in Wikipedia too. I didn't believe it, it doesn't make
>sense. Why not just call all radio frequencies and IF frequencies
>above 20kHz "supersonic"? Then all radios (*) are supersonic, and
>we're back to super meaning nothing at all.

Possibly because heterodyne receivers mixed to sonic frequencies.

John

466. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 19:45:49 UTC
From: John Larkin <jjSNIPlarkin@highTHISlandtechnology.com>
Message-ID: <k5kpu49aemc48i3u7hemml9jelg6plu7br@4ax.com>
Source record: 2970
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Mon, 20 Apr 2009 12:36:12 -0700, Joerg
<notthisjoergsch@removethispacbell.net> wrote:

>Tim Shoppa wrote:
>> A terminology question I suppose about the derivation of the term
>> "Superheterodyne" more than anything else:
>>
>> Does the "Super" actually mean anything? Is there a Subheterodyne?
>>
>> Traditionally superhets mix a higher radio frequency down to a lower
>> IF frequency, but certainly in the past few decades radios with IF's
>> above the RF frequency have become very common in broadband
>> applications, and those are still called superhets, not subhets :-).
>>
>> Google turns up a couple hits on subheterodyne but other than one that
>> might mean "IF higher in frequency than RF" I don't recognize what
>> they mean..
>>
>> I suspect that "Super" was more a marketing term than anything
>> else :-).
>>
>
>If you want to file a new patent for old stuff you could try
>subheterodyne and it just might sail through :-)
>
>Oh wait, call it hyperheterodyne, has more glitz. Just like the
>supermercados in Spain.

I think we're going to be doing a superhet receiver soon. Maybe we'll
do it in an FPGA!

John

467. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 19:46:34 UTC
From: Highland Ham <rfburns@allbands.net>
Message-ID: <88CdnYIR0fVjX3HUnZ2dnUVZ8j2dnZ2d@pipex.net>
Source record: 2966
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Tim Shoppa wrote:
> A terminology question I suppose about the derivation of the term
> "Superheterodyne" more than anything else:
>
> Does the "Super" actually mean anything? Is there a Subheterodyne?
>
> Traditionally superhets mix a higher radio frequency down to a lower
> IF frequency, but certainly in the past few decades radios with IF's
> above the RF frequency have become very common in broadband
> applications, and those are still called superhets, not subhets :-).
>
> Google turns up a couple hits on subheterodyne but other than one that
> might mean "IF higher in frequency than RF" I don't recognize what
> they mean..
======================
Many of not most modern HF receivers have a first IF in the 45-75 MHz range.

==
>
> I suspect that "Super" was more a marketing term than anything
> else :-).
>
> Tim N3QE

frank GM0CSZ / KN6WH

468. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 19:49:51 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <yl4Hl.25056$Ws1.2821@nlpi064.nbdc.sbc.com>
Source record: 2971
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

John Larkin wrote:
> On Mon, 20 Apr 2009 12:36:12 -0700, Joerg
> <notthisjoergsch@removethispacbell.net> wrote:
>
>> Tim Shoppa wrote:
>>> A terminology question I suppose about the derivation of the term
>>> "Superheterodyne" more than anything else:
>>>
>>> Does the "Super" actually mean anything? Is there a Subheterodyne?
>>>
>>> Traditionally superhets mix a higher radio frequency down to a lower
>>> IF frequency, but certainly in the past few decades radios with IF's
>>> above the RF frequency have become very common in broadband
>>> applications, and those are still called superhets, not subhets :-).
>>>
>>> Google turns up a couple hits on subheterodyne but other than one that
>>> might mean "IF higher in frequency than RF" I don't recognize what
>>> they mean..
>>>
>>> I suspect that "Super" was more a marketing term than anything
>>> else :-).
>>>
>> If you want to file a new patent for old stuff you could try
>> subheterodyne and it just might sail through :-)
>>
>> Oh wait, call it hyperheterodyne, has more glitz. Just like the
>> supermercados in Spain.
>

I meant hypermercados :-)

> I think we're going to be doing a superhet receiver soon. Maybe we'll
> do it in an FPGA!
>

How'd you do the preamp in there?

--
Regards, Joerg

http://www.analogconsultants.com/

"gmail" domain blocked because of excessive spam.
Use another domain or send PM.

469. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 19:56:53 UTC
From: Spehro Pefhany <speffSNIP@interlogDOTyou.knowwhat>
Message-ID: <ppkpu4h95oka73o1h9232kn0jtukevte5t@4ax.com>
Source record: 2972
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Mon, 20 Apr 2009 12:49:51 -0700, Joerg
<notthisjoergsch@removethispacbell.net> wrote:

>John Larkin wrote:
>> On Mon, 20 Apr 2009 12:36:12 -0700, Joerg
>> <notthisjoergsch@removethispacbell.net> wrote:
>>
>>> Tim Shoppa wrote:
>>>> A terminology question I suppose about the derivation of the term
>>>> "Superheterodyne" more than anything else:
>>>>
>>>> Does the "Super" actually mean anything? Is there a Subheterodyne?
>>>>
>>>> Traditionally superhets mix a higher radio frequency down to a lower
>>>> IF frequency, but certainly in the past few decades radios with IF's
>>>> above the RF frequency have become very common in broadband
>>>> applications, and those are still called superhets, not subhets :-).
>>>>
>>>> Google turns up a couple hits on subheterodyne but other than one that
>>>> might mean "IF higher in frequency than RF" I don't recognize what
>>>> they mean..
>>>>
>>>> I suspect that "Super" was more a marketing term than anything
>>>> else :-).
>>>>
>>> If you want to file a new patent for old stuff you could try
>>> subheterodyne and it just might sail through :-)
>>>
>>> Oh wait, call it hyperheterodyne, has more glitz. Just like the
>>> supermercados in Spain.
>>
>
>I meant hypermercados :-)

So a convenience store would be a "hypomercado"?

470. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 19:57:06 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <ms4Hl.25060$Ws1.902@nlpi064.nbdc.sbc.com>
Source record: 2973
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

```
Spehro Pefhany wrote:
> On Mon, 20 Apr 2009 12:49:51 -0700, Joerg
> <notthisjoergsch@removethispacbell.net> wrote:
>
>> John Larkin wrote:
>>> On Mon, 20 Apr 2009 12:36:12 -0700, Joerg
>>> <notthisjoergsch@removethispacbell.net> wrote:
>>>
>>>> Tim Shoppa wrote:
>>>>> A terminology question I suppose about the derivation of the term
>>>>> "Superheterodyne" more than anything else:
>>>>>
>>>>> Does the "Super" actually mean anything? Is there a Subheterodyne?
>>>>>
>>>>> Traditionally superhets mix a higher radio frequency down to a lower
>>>>> IF frequency, but certainly in the past few decades radios with IF's
>>>>> above the RF frequency have become very common in broadband
>>>>> applications, and those are still called superhets, not subhets :-).
>>>>>
>>>>> Google turns up a couple hits on subheterodyne but other than one that
>>>>> might mean "IF higher in frequency than RF" I don't recognize what
>>>>> they mean..
>>>>>
>>>>> I suspect that "Super" was more a marketing term than anything
>>>>> else :-).
>>>>>
>>>> If you want to file a new patent for old stuff you could try
>>>> subheterodyne and it just might sail through :-)
>>>>
>>>> Oh wait, call it hyperheterodyne, has more glitz. Just like the
>>>> supermercados in Spain.
>> I meant hypermercados :-)
>
> So a convenience store would be a "hypomercado"?
>

:-)

Those actually called themselves supermercado a lot, probably the reason
why the real ones of the size of a Safeway had to notch it up one category.

--
Regards, Joerg
```

http://www.analogconsultants.com/

"gmail" domain blocked because of excessive spam.
Use another domain or send PM.

471. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 20:57:26 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <9f7d92d4-041d-4f08-bfdd-01951381986c@k2g2000yql.googlegroups.com>
Source record: 2974
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

```
On Apr 20, 3:44 pm, John Larkin
<jjSNIPlar...@highTHISlandtechnology.com> wrote:
> On Mon, 20 Apr 2009 12:23:53 -0700 (PDT), Tim Shoppa
>
>
>
>
>
> <sho...@trailing-edge.com> wrote:
> >On Apr 20, 1:10 pm, John Larkin
> ><jjSNIPlar...@highTHISlandtechnology.com> wrote:
> >> On Mon, 20 Apr 2009 09:50:05 -0700 (PDT), Tim Shoppa
> >
> >> <sho...@trailing-edge.com> wrote:
> >> >A terminology question I suppose about the derivation of the term
> >> >"Superheterodyne" more than anything else:
> >
> >> >Does the "Super" actually mean anything? Is there a Subheterodyne?
> >
> >> >Traditionally superhets mix a higher radio frequency down to a lower
> >> >IF frequency, but certainly in the past few decades radios with IF's
> >> >above the RF frequency have become very common in broadband
> >> >applications, and those are still called superhets, not subhets :-).
> >
> >> >Google turns up a couple hits on subheterodyne but other than one that
> >> >might mean "IF higher in frequency than RF" I don't recognize what
> >> >they mean..
> >
> >> >I suspect that "Super" was more a marketing term than anything
> >> >else :-).
> >
> >> >Tim N3QE
> >
> >> Supersonic.
> >
> >>http://en.wikipedia.org/wiki/Superheterodyne_receiver
> >
> >I saw that in Wikipedia too. I didn't believe it, it doesn't make
> >sense. Why not just call all radio frequencies and IF frequencies
> >above 20kHz "supersonic"? Then all radios (*) are supersonic, and
> >we're back to super meaning nothing at all.
> >
> Possibly because heterodyne receivers mixed to sonic frequencies.
```

I didn't really trust Wikipedia on this (it uses unusual language to talk about perfectly conventional subjects) but I did find my December 1922 QST, and it says (page 11):

In December, 1919, Major E. H. Armstrong gave publicity to an indirect method of obtaining short-wave amplification, called the Super-Heterodyne. The idea is to reduce the incoming frequency which may be, say 1,500,000 cycles (200 meters), to some suitable super-audible frequency which can be amplified efficiently, then passing this current through a radio frequency amplifier and finally rectifying and carrying on to one or two stages of audio frequency amplification.

To me that sounds a little less awkward and more natural than the derivation that Wikipedia tries to draw.

Tim N3QE

472. Headphone Impedance

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 21:46:48 UTC
From: David <DavidBR549@gmail.com>
Message-ID: <d8ef4a43-b0b4-44e1-bebe-aa2d8c6397eb@l9g2000vba.googlegroups.com>
Source record: 2975

After measuring the headphones with an LCR meter, is there a way to take the inductance, capacitance and resistance to find the AC impedance of the headphones at 1KHZ?

473. Re: XTAL Radio Receiver Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 21:48:39 UTC
From: amdx <amdx@knology.net>
Message-ID: <cee6$49ecedbb$d8baf3ed$27657@KNOLOGY.NET>
Source record: 2976

"David" <DavidBR549@gmail.com> wrote in message
news:5caa0a68-500d-4d9d-b9e4-8a1dc295fa74@z19g2000vbz.googlegroups.com...
> Looking for Crystal Radio Receiver Circuits, that have a voltage
> quadrupler to increase headphone volume without batteries or AC power.

Hi David,
I don't think it really works that way. The audio is level is dependent on
the level of the RF signal.
Get a long antenna and sensitive headphones.
Check the http://members.shaw.ca/ve7sl/crystal.html
and see the list at the bottom, check out Rap N Tap.
Mike

474. Re: Looking for M67715 PA Module

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 22:08:24 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <sn6Hl.28794$j7.492956@news.indigo.ie>
Source record: 2978

On Mon, 20 Apr 2009 19:36:55 +0000, Highland Ham wrote:

> === Another possible
> source is Mainline Electronics : PO Box 235 Leicester LE2 9SH -
> England ,UK
> tel : +44 116 277 7648 ; Fax +44 116 247 7551 http://mainline-group.com/
>
> They also have a 'surplus department'
>
> Frank GM0CSZ / KN6WH

Or GH Engineering http://www.ghengineering.co.uk/products/Mitsubishi.htm
They list the M67715 as: "£48 - obsolete - while stocks last"

--
Remove 'X' to reply by e-mail.
Linux-2.6.26

475. Re: Headphone Impedance

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 22:15:44 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <C96dnX6LKumHaXHUnZ2dnUVZ_gti4p2d@web-ster.com>
Source record: 2979

David wrote:
> After measuring the headphones with an LCR meter, is there a way to
> take the inductance, capacitance and resistance to find the AC
> impedance of the headphones at 1KHZ?

If you measured all three at 1kHz, yes.

Otherwise you may find that the _effective_ L, C and R at 1kHz was just
that -- effective, not actual.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Do you need to implement control loops in software?
"Applied Control Theory for Embedded Systems" was written for you.
See details at http://www.wescottdesign.com/actfes/actfes.html

476. Re: XTAL Radio Receiver Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 22:20:07 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <eaidnT16IoW_aHHUnZ2dnUVZ_v6dnZ2d@web-ster.com>
Source record: 2980

David wrote:
> Looking for Crystal Radio Receiver Circuits, that have a voltage
> quadrupler to increase headphone volume without batteries or AC power.

If you are quadrupling the voltage at the headphones, then you are, of necessity, dividing the impedance at the detector by a factor of 16.

You only have so much power available at the antenna; a detector followed by an unpowered "voltage quadrupler" won't extract any more power than any other equivalently-well-matched detector, and so won't put any more power to the headphones.

If you really want to do this passively, and not rely on some near-by strong station for power, then you need to optimize your circuit and headphones for efficiency, and you need to get a _lot_ of wire into the air.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Do you need to implement control loops in software?
"Applied Control Theory for Embedded Systems" was written for you.
See details at http://www.wescottdesign.com/actfes/actfes.html

477. Re: XTAL Radio Receiver Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 22:24:53 UTC
From: Unca Pete <radioconnection@cox.net>
Message-ID: <Xi7Hl.18411$gC1.13234@newsfe19.iad>
Source record: 2982

"David" <DavidBR549@gmail.com> wrote in message
news:5caa0a68-500d-4d9d-b9e4-8a1dc295fa74@z19g2000vbz.googlegroups.com...
> Looking for Crystal Radio Receiver Circuits, that have a voltage
> quadrupler to increase headphone volume without batteries or AC power.

It is better to play with the design to achieve the desired matching between the tuner, detector and headphones. Diodes have losses, and fancy circuits like your suggesting will only multiply the losses, not the voltage.

Pete

478. Re: XTAL Radio Receiver Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 23:07:25 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <e8udnd3oN795bHHUnZ2dnUVZ_gqdnZ2d@earthlink.com>
Source record: 2977

"David" <DavidBR549@gmail.com> wrote in message
news:5caa0a68-500d-4d9d-b9e4-8a1dc295fa74@z19g2000vbz.googlegroups.com...
> Looking for Crystal Radio Receiver Circuits, that have a voltage
> quadrupler to increase headphone volume without batteries or AC power.

I don't have a circuit, but have seen where a transistor was powered by a
rectified radio signal to boost the audio signal. I think a seperate
antenna and tuned circuit was used on the strongest signal in the area.

479. Re: Headphone Impedance

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 23:28:49 UTC
From: Highland Ham <rfburns@allbands.net>
Message-ID: <sZOdnT3xluyJanHUnZ2dnUVZ8tqdnZ2d@pipex.net>
Source record: 2981

David wrote:
> After measuring the headphones with an LCR meter, is there a way to
> take the inductance, capacitance and resistance to find the AC
> impedance of the headphones at 1KHZ?
==========
the Thandar Electronics Ltd LCR meter model TC200 with LCD readout
(approx 20 yrs old) operates at 1kHz.

I use the instrument regularly ie > once a week.

Thandar Electronics Ltd
London Road
St Ives
Huntingdon
Cambs PE17 4HJ

Now renamed Thrulby-Thandar Instruments Ltd
http://www.tti-test.com/

Frank GM0CSZ / KN6WH

480. Re: XTAL Radio Receiver Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-20 23:40:35 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <n31qu4d1v9v6636fdlr5au4mcl80n9cap5@4ax.com>
Source record: 2983

On Mon, 20 Apr 2009 11:34:49 -0700 (PDT), David <DavidBR549@gmail.com>
wrote:

>Looking for Crystal Radio Receiver Circuits, that have a voltage
>quadrupler to increase headphone volume without batteries or AC power.

I assume you are talking about a broadcast receiver for frequencies
below 1600 kHz. At such frequencies and with a typical 500 pF variable
capacitor, the impedance levels for an LC resonant circuit is quite
high.

Loading it with a crystal detector and some low impedance (30 or less)
headphone will load the resonant circuit quite heavily, reducing the
output quite heavily.

In the old days, the typical impedance of a headphone might have been
about 2000 ohms, loading the resonant circuit much less. In order to
cause a similar loading to the resonant circuit using current
headphones, you need an audio transformer with 2000:30 impedance ratio
or 8:1 turns ratio.

Paul OH3LWR

481. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-21 00:28:15 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <fn8Hl.5835$Lr6.4517@flpi143.ffdc.sbc.com>
Source record: 2984
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

```
Tim Shoppa wrote:
> On Apr 20, 3:44 pm, John Larkin
> <jjSNIPlar...@highTHISlandtechnology.com> wrote:
>> On Mon, 20 Apr 2009 12:23:53 -0700 (PDT), Tim Shoppa
>>
>>
>>
>>
>>
>> <sho...@trailing-edge.com> wrote:
>>> On Apr 20, 1:10 pm, John Larkin
>>> <jjSNIPlar...@highTHISlandtechnology.com> wrote:
>>>> On Mon, 20 Apr 2009 09:50:05 -0700 (PDT), Tim Shoppa
>>>> <sho...@trailing-edge.com> wrote:
>>>>> A terminology question I suppose about the derivation of the term
>>>>> "Superheterodyne" more than anything else:
>>>>> Does the "Super" actually mean anything? Is there a Subheterodyne?
>>>>> Traditionally superhets mix a higher radio frequency down to a lower
>>>>> IF frequency, but certainly in the past few decades radios with IF's
>>>>> above the RF frequency have become very common in broadband
>>>>> applications, and those are still called superhets, not subhets :-).
>>>>> Google turns up a couple hits on subheterodyne but other than one that
>>>>> might mean "IF higher in frequency than RF" I don't recognize what
>>>>> they mean..
>>>>> I suspect that "Super" was more a marketing term than anything
>>>>> else :-).
>>>>> Tim N3QE
>>>> Supersonic.
>>>> http://en.wikipedia.org/wiki/Superheterodyne_receiver
>>> I saw that in Wikipedia too. I didn't believe it, it doesn't make
>>> sense. Why not just call all radio frequencies and IF frequencies
>>> above 20kHz "supersonic"? Then all radios (*) are supersonic, and
>>> we're back to super meaning nothing at all.
>> Possibly because heterodyne receivers mixed to sonic frequencies.
>
> I didn't really trust Wikipedia on this (it uses unusual language to
> talk about perfectly conventional subjects) but I did find my December
> 1922 QST, and it says (page 11):
>

Wow! I didn't know you were this old.

[...]
```

--
SCNR, Joerg

http://www.analogconsultants.com/

"gmail" domain blocked because of excessive spam.
Use another domain or send PM.

482. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-21 01:05:46 UTC
From: Phil Allison <philallison@tpg.com.au>
Message-ID: <754kfcF1691ciU1@mid.individual.net>
Source record: 2985
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"Tim Shoppa"
>
>A terminology question I suppose about the derivation of the term
> "Superheterodyne" more than anything else:
>
> Does the "Super" actually mean anything?

** Refers to the term " supersonic frequency " - the general name for any frequency between the upper limit of the audible range (20kHz) and the lower limit of common radio transmission frequencies or "long waves" at about 150kHz.

> Is there a Subheterodyne?

** No.

> Traditionally superhets mix a higher radio frequency down to a lower
> IF frequency, but certainly in the past few decades radios with IF's
> above the RF frequency have become very common in broadband
> applications, and those are still called superhets, not subhets :-).

** The name now refers to any receiver that involves a frequency changer stage prior to detection.

If you want to know the meaning of any term, you have to study how PEOPLE used it - both in the past and the present.

Only complete fools and radio hams study the words themselves in isolation and try to de-construct them.

..... Phil

483. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-21 02:45:10 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <uncqu4dj507nvghk36og3koa9mfrq1k4rm@4ax.com>
Source record: 2986
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Mon, 20 Apr 2009 13:57:26 -0700 (PDT), Tim Shoppa
<shoppa@trailing-edge.com> wrote:

>On Apr 20, 3:44ï¿½pm, John Larkin
><jjSNIPlar...@highTHISlandtechnology.com> wrote:
>> On Mon, 20 Apr 2009 12:23:53 -0700 (PDT), Tim Shoppa
>>
>>
>>
>>
>>
>> <sho...@trailing-edge.com> wrote:
>> >On Apr 20, 1:10ï¿½pm, John Larkin
>> ><jjSNIPlar...@highTHISlandtechnology.com> wrote:
>> >> On Mon, 20 Apr 2009 09:50:05 -0700 (PDT), Tim Shoppa
>>
>> >> <sho...@trailing-edge.com> wrote:
>> >> >A terminology question I suppose about the derivation of the term
>> >> >"Superheterodyne" more than anything else:
>>
>> >> >Does the "Super" actually mean anything? Is there a Subheterodyne?
>>
>> >> >Traditionally superhets mix a higher radio frequency down to a lower
>> >> >IF frequency, but certainly in the past few decades radios with IF's
>> >> >above the RF frequency have become very common in broadband
>> >> >applications, and those are still called superhets, not subhets :-).
>>
>> >> >Google turns up a couple hits on subheterodyne but other than one that
>> >> >might mean "IF higher in frequency than RF" I don't recognize what
>> >> >they mean..
>>
>> >> >I suspect that "Super" was more a marketing term than anything
>> >> >else :-).
>>
>> >> >Tim N3QE
>>
>> >> Supersonic.
>>
>> >>http://en.wikipedia.org/wiki/Superheterodyne_receiver
>>
>> >I saw that in Wikipedia too. I didn't believe it, it doesn't make
>> >sense. Why not just call all radio frequencies and IF frequencies
>> >above 20kHz "supersonic"? Then all radios (*) are supersonic, and

>> >we're back to super meaning nothing at all.
>>
>> Possibly because heterodyne receivers mixed to sonic frequencies.
>
>I didn't really trust Wikipedia on this (it uses unusual language to
>talk about perfectly conventional subjects) but I did find my December
>1922 QST, and it says (page 11):
>
> In December, 1919, Major E. H. Armstrong gave
> publicity to an indirect method of obtaining
> short-wave amplification, called the Super-
> Heterodyne. The idea is to reduce the incoming
> frequency which may be, say 1,500,000 cycles
> (200 meters), to some suitable super-audible
> frequency which can be amplified efficiently, then
> passing this current through a radio frequency
> amplifier and finally rectifying and carrying on
> to one or two stages of audio frequency
> amplification.
>
>To me that sounds a little less awkward and more natural than the
>derivation that Wikipedia tries to draw.
>
>Tim N3QE

I did like the wiki bit about people using hundred-tube TRF receivers.

John

484. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-21 03:19:39 UTC
From: hatespam@hatespam.com
Message-ID: <49ed3857.41031686@news.houston.sbcglobal.net>
Source record: 2987
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

John Larkin <jjSNIPlarkin@highTHISlandtechnology.com> wrote:

>On Mon, 20 Apr 2009 09:50:05 -0700 (PDT), Tim Shoppa
><shoppa@trailing-edge.com> wrote:
>
>>A terminology question I suppose about the derivation of the term
>>"Superheterodyne" more than anything else:
>>
>>Does the "Super" actually mean anything? Is there a Subheterodyne?
>
>Supersonic.

So, if a basketball player from a certain team in Seattle were flying
on the Concorde, and listening to a particular brand of antique radio,
it'd be a supersonic SuperSonic's Superdyne supersonic heterodyne?

485. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-21 04:07:49 UTC
From: AF6AY <LenAnderson@ieee.org>
Message-ID: <3a6dad5b-16e9-40fe-9acc-9fde88f0ba46@j18g2000prm.googlegroups.com>
Source record: 2988
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Apr 20, 9:50 am, Tim Shoppa <sho...@trailing-edge.com> wrote:

>A terminology question I suppose about the derivation of the term
>"Superheterodyne" more than anything else:
>
>Does the "Super" actually mean anything? Is there a Subheterodyne?

The heterodyning of two signals was barely known around 1902 to
1904 when very early entrepreneur-experimenter Reginald Fessenden
was fooling around in his lab trying to improve the sensitivity of
early coherer-type detectors. Fessenden tried mixing the output
of a very low-power spark transmitter with his simple receiver and
reported getting a clearer tone from a distant station. Fessenden
was keen on making himself known so he wrote that up and it was
published.

However, by 1906 the first audion tube was made and in a few years
later, some production units were available for experimenters,
namely a very young Armstrong...who went on to start gaining fame
with his regenerative tube receiver. By 1918, Amstrong was now a
Major in the US Army and stationed in Paris with WW One having
stopped. Armstrong remembered the Fessenden experiment and
remembered the 'heterodyning' process of mixing low-level RF signals
with higher-level RF (the 'Local Oscillator' as it became known),
getting two extra mixing products out of a 'mixer' stage (sum and
difference of the two main input frequencies). By now academics
had gone into the heterodyning process in more detail with at
least 14 years between Fessenden's experiment and Armstrong's tube
version.

Armstrong's patent application promised an equal-selectivity at
any antenna-input frequency, something not possible with TRF
receivers, narrower at lower frequencies, wider at higher ones.

>I suspect that "Super" was more a marketing term than anything
>else :-).

Might have been had there been ANY real "market" for radios back
then. Of course, anything RF done with vacuum tubes beat the pants
off any crystal detector and spark transmitter, so it was definitely
a 'super' thing. :-)

Actually, Ed Armstrong had a battle with various nations on the
patent for his superheterodyne, at least a year or two later with
someone in England and another in France. Patent suits would

continue to dog Armstrong until the end of his life, probably causing the depression that, in turn, caused him to suicide. Just the same, Armstrong had the chutzpah to promote his ideas and he is truly the father of FM broadcasting allowing high-fidelity music to any FM receiver. He was no slouch in getting organized and promoting himself.

There's a whole lot of material on Edwin Howard Armstrong at several websites, reachable through members of the Radio Club of America, the oldest association (since 1909) and still going.

The three basic forms of modulation of a carrier (amplitude, frequency, phase) were worked out by John Carson of AT&T in 1915, before Armstrong got going on his 'superhet' idea. Whether or not Ed saw those is unknown, but Carson had them worked out already. Those very early 'radio' experimenters, from academics to amateurs, were very very busy in the first two decades of 'radio' existance, going from essentially nothing to several somethings. 'Radio' stayed a fertile field for scientific-engineering innovation for three more decades, spurred into a couple quantum jumps during the World War II years.

Reginald Fessenden sort of faded into the woodwork after his famous "Christmas Eve" sound broadcast of 1906...using a spark transmitter whose antenna wire was modulated by a special carbon microphone! I doubt that any AM broadcast station ever tried to use that system since so it was an early curiosity in radio history. Armstrong's name spread and so did his inventions...not just the regen or superhet, but also the super-regenerative for high HF and into VHF (note the 'super' addition by the extra oscillation) and, of course, to FM broadcasting.

73, Len AF6AY

486. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-21 04:20:11 UTC
From: AF6AY <LenAnderson@ieee.org>
Message-ID: <661f780c-eef9-4d70-92e1-628f97277533@k19g2000prh.googlegroups.com>
Source record: 2989
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Apr 20, 1:57 pm, Tim Shoppa <sho...@trailing-edge.com> wrote:
> On Apr 20, 3:44 pm, John Larkin
>
> didn't really trust Wikipedia on this (it uses unusual language to
>talk about perfectly conventional subjects) but I did find my December
>1922 QST, and it says (page 11):
>
> In December, 1919, Major E. H. Armstrong gave
> publicity to an indirect method of obtaining
> short-wave amplification, called the Super-
> Heterodyne. The idea is to reduce the incoming
> frequency which may be, say 1,500,000 cycles
> (200 meters), to some suitable super-audible
> frequency which can be amplified efficiently, then
> passing this current through a radio frequency
> amplifier and finally rectifying and carrying on
> to one or two stages of audio frequency
> amplification.
>
>To me that sounds a little less awkward and more natural than the
>derivation that Wikipedia tries to draw.

Everyone ought to realize that "Wikipedia" data can be written by
ANYONE
and that the ARRL (who has always published QST) is NOT a technical-
expertise source. Ed Armstrong's original patent on the
superheterodyne
can be found on the 'web in digitized image form. Takes some
searching.

The word prefix 'super' generally refers to something 'better' than
the word
without that prefix. Armstrong got a patent for the regenerative
detector, He
also got a patent for a SUPER-Regenerative detector.

Think also SUPERman. 'Mercado' has already been mentioned, but folks
have neglected the MARKET...which expanded into SUPERmarket, generally
a chain of them under one label or another.

73, Len AF6AY
ex-ARRL member (for good reason)

487. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-21 05:05:01 UTC
From: Phil Allison <philallison@tpg.com.au>
Message-ID: <7552fvF15d317U1@mid.individual.net>
Source record: 2990
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"AF6AY"

> Everyone ought to realize that "Wikipedia" data can be written by
> ANYONE

** As are NG posts.

The difference being that Wikis are full of checkable references and are
subject to on-going correction.

>The word prefix 'super' generally refers to something 'better' than
> the word without that prefix.

** So this radio ham clot has no idea what the origin of the term is really
is (although it has been posted) and is making the classic fuckwit
BLUNDER of trying to de-cipher the meaning from the word alone.

>Think also SUPERman.

** And supercilious.

> 73, Len AF6AY
> ex-ARRL member (for good reason)

** Lunatics like Len are not welcome as members ?

..... Phil

488. Re: Looking for M67715 PA Module

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-21 05:27:59 UTC
From: Bob <biascomms@invalid.inv>
Message-ID: <7553pdF1681daU1@mid.individual.net>
Source record: 2991

Highland Ham wrote:

> Another possible source is Mainline Electronics : PO Box 235
> Leicester LE2 9SH - England ,UK
> tel : +44 116 277 7648 ; Fax +44 116 247 7551
> http://mainline-group.com/
>
They are *unbelievably* expensive! I presume that all their coil winding wire
is gold!

> They also have a 'surplus department'

... Not listed on their appalling website!

Bob

489. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-21 06:02:59 UTC
From: Greegor <Greegor47@gmail.com>
Message-ID: <997d4b3b-1a92-4136-9d2e-81bc210f1c7b@e21g2000yqb.googlegroups.com>
Source record: 2992
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

What specifically are your complaints with this Wiki ?

http://en.wikipedia.org/wiki/Superheterodyne_receiver

Superheterodyne receiver
From Wikipedia, the free encyclopedia
Jump to: navigation, search
This article needs additional citations for verification. Please help improve this article by adding reliable references (ideally, using inline citations). Unsourced material may be challenged and removed. (December 2008)

A 5-tubes superhet receiver made in Japan about 1955.In electronics, the superheterodyne receiver (also known as the supersonic heterodyne receiver, or by the abbreviated form superhet) is a receiver which uses the principle of frequency mixing or heterodyning to convert the received signal to a lower (sometimes higher) "intermediate" frequency, which can be more conveniently processed than the original carrier frequency. Virtually all modern radio and TV receivers use the Superheterodyne principle.

Contents [hide]
1 History
2 Overview
3 Design and its evolution
4 Drawbacks
4.1 High-side and low-side injection
4.2 Image Frequency (fimage)
4.3 Local oscillator radiation
4.4 Local oscillator sideband noise
5 See also
6 References
7 Footnotes
8 External links

[edit] History

Two section variable capacitor, used in superhet receiverThe word heterodyne is derived from the Greek roots hetero- "different", and -dyne "power". The original heterodyne technique was pioneered by Canadian inventor-engineer Reginald Fessenden but was not pursued far because local oscillators were not very stable at the time.[1]

Later, the superheterodyne (superhet) principle was conceived in 1918 by Edwin Armstrong during World War I, as a means of overcoming the

deficiencies of early vacuum triodes used as high-frequency amplifiers in radio direction finding (RDF) equipment. Unlike simple radio communication, which only needs to make transmitted signals audible, RDF requires actual measurements of received signal strength, which necessitates linear amplification of the actual carrier wave.

In a triode RF amplifier, if both the plate and grid are connected to resonant circuits tuned to the same frequency, stray capacitive coupling between the grid and the plate will cause the amplifier to go into oscillation if the stage gain is much more than unity. In early designs, dozens (in some cases over 100) low-gain triode stages had to be connected in cascade to make workable equipment, which drew enormous amounts of power in operation and required a team of maintenance engineers. The strategic value was so high, however, that the British Admiralty felt the high cost was justified.

Armstrong had realized that if RDF could be operated at a higher frequency, it would allow detection of enemy shipping much more effectively, but at the time, no practical "short wave" amplifier existed, (defined then as any frequency above 500 kHz) due to the limitations of triodes of the day.

A "heterodyne" refers a beat or "difference" frequency produced when two or more radio frequency carrier waves are fed to a detector. The term was originally coined by Canadian Engineer Reginald Fessenden describing his proposed method of making Morse Code transmissions from an Alexanderson alternator type transmitter audible. With the Spark gap transmitters then in wide use, the Morse Code signal consisted of short bursts of a heavily modulated carrier wave which could be clearly heard as a series of short chirps or buzzes in the receiver's headphones.

The signal from an Alexanderson Alternator on the other hand, did not have any such inherent modulation and Morse Code from one of those would only be heard as a series of clicks or thumps. Fessenden's idea was to run two Alexanderson Alternators, one producing a carrier frequency 3kHz higher than the other. In the receiver's detector the two carriers would beat together to produce a 3kHz tone and so in the headphones the morse signals would then be heard as a series of 3kHz beeps. For this he coined the term "heterodyne" meaning "Generated by a Difference" (in frequency).

Later, when vacuum triodes became available, the same result could be achieved more conveniently by incorporating a "local oscillator" in the receiver, which became known as a "Beat Frequency Oscillator" or BFO. As the BFO frequency was varied, the pitch of the heterodyne could be heard to vary with it. If the frequences were too far apart the heterodyne became supersonic and hence no longert audible.

It had been noticed some time before that if a regenerative receiver was allowed to go into oscillation, other receivers nearby would suddenly start picking up stations on frequencies different from those

that the stations were actually transmitted on. Armstrong (and others) eventually deduced that this was caused by a "supersonic heterodyne" between the station's carrier frequency and the oscillator frequency. Thus, for example, if a station was transmitting on 300 kHz and the oscillating receiver was set to 400 kHz, the station would be heard not only at the original 300 kHz, but also at 100 kHz and 700 kHz.

Armstrong realized that this was a potential solution to the "short wave" amplification problem, since the beat frequency still retained its original moduation, but on a lower carrier frequency. To monitor a frequency of 1500 kHz for example, he could set up an oscillator to say, 1560 kHz, which would produce a heterodyne of 60kHz, a frequency that could then be much more conveniently amplified by the triodes of the day. He termed this the "Intermediate Frequency" often abbreviated to "IF"

Early Superheterodyne receivers actually used IFs as low as 20 kHz, often based around the self-resonance of iron-cored transformers. This made them extremely susceptible to image frequency interference, but at the time, the main objective was sensitivity rather than selectivity. Using this technique, a small number triodes could be made to do work that formerly required dozens or even hundreds.

1920s commercial IF transformers actually look very similar to 1920s audio interstage coupling transformers, and were wired up in an almost identical manner. By the mid-1930s superhets were using much higher intermediate frequencies, (typically around 440-470kHz), using tuned coils very similar in construction to the aerial and oscillator coils. However the term "Intermediate Frequency Transformer" or "IFT" still persists to this day.

Modern receivers typically use a mixture of Ceramic Filters and/or Saw Resonators as well as traditional tuned-inductor IF transformers

Armstrong was able to put his ideas into practice quite quickly, and the technique was rapidly adopted by the military. However, it was less popular when commercial radio broadcasting began in the 1920s. There were many factors involved,but the main issues were the need for an extra tube for the oscillator, the generally higher cost of the receiver, and the level of technical skill required to operate it. For early domestic radios, Tuned RFs ("TRF"), also called the Neutrodyne, were much more popular because they were cheaper, easier for a non-technical owner to use, and less costly to operate. Armstrong eventually sold his superheterodyne patent to Westinghouse, who then sold it to RCA, the latter monopolizing the market for superheterodyne receivers until 1930.[2]

By the 1930s, improvements in vacuum tube technology rapidly eroded the TRF receiver's cost advantages, and the explosion in the number of broadcasting stations created a demand for cheaper, higher-performance receivers.

First, the development of practical indirectly-heated-cathode tubes allowed the mixer and oscillator functions to be combined in a single Pentode tube, in the so-called Autodyne mixer. This was rapidly followed by the introduction of low-cost multi-element tubes specifically designed for superheterodyne operation. These allowed the use of much higher Intermediate Frequencies (typically around 440-470kHz) which eliminated the problem of image frequency interference. By the mid-30s, for commercial receiver production the TRF technique was obsolete.

The superheterodyne principle was eventually taken up for virtually all commercial radio and TV designs.

[edit] Overview
The superhet receiver consists of three principle parts, the local oscillator, a mixer that mixes the local oscillator's signal with the received signal, and a tuned amplifier.

Reception starts with an antenna signal, optionally amplified, including the frequency the user wishes to tune, fd. The local oscillator is tuned to produce a frequency close to fd, fLO. The received signal is mixed with the local oscillator's, producing four frequencies in the output; the original signal, the original fLO, and the two new frequencies fd+fLO and fd-fLO. The output signal also generally contains a number of undesirable mixtures as well. (These are 3rd- and higher-order intermodulation products. If the mixing were performed as a pure, ideal multiplication, the original fd and fLO would also not appear; in practice they do appear because mixing is done by a nonlinear process that only approximates true ideal multiplication.)

The amplifier portion of the system is tuned to be highly selective at a single frequency, fIF. By changing fLO, the resulting fd-fLO (or fd +fLO) signal can be tuned to the amplifier's fIF. In typical amplitude modulation ("AM radio" in the U.S., or MW) receivers, that frequency is 455 kHz; for FM receivers, it is usually 10.7 MHz; for television, 45 MHz. Other signals from the mixed output of the heterodyne are filtered out by the amplifier.

[edit] Design and its evolution
The diagram below shows the basic elements of a single conversion superhet receiver. The essential elements of a local oscillator and a mixer followed by a fixed-tuned filter and IF amplifier are common to all superhet circuits. Cost-optimized designs may use one active device for both local oscillator and mixer--this is sometimes called a "converter" stage. One such example is the pentagrid converter.

The advantage to this method is that most of the radio's signal path has to be sensitive to only a narrow range of frequencies. Only the front end (the part before the frequency converter stage) needs to be sensitive to a wide frequency range. For example, the front end might need to be sensitive to 1-30 MHz, while the rest of the radio might need to be sensitive only to 455 kHz, a typical IF. Only one or two

tuned stages need to be adjusted to track over the tuning range of the receiver; all the intermediate-frequency stages operate at a fixed frequency which need not be adjusted.

To overcome obstacles such as image response, multiple IF stages are used, and in some case multiple stages with two IFs of different values. For example, the front end might be sensitive to 1-30 MHz, the first half of the radio to 5 MHz, and the last half to 50 kHz. Two frequency converters would be used, and the radio would be a "Double Conversion Super Heterodyne"--a common example is a television receiver where the audio information is obtained from a second stage of intermediate frequency conversion. Occasionally special-purpose receivers will use an intermediate frequency much higher than the signal, in order to obtain very high image rejection.

Superheterodyne receivers have superior characteristics to simpler receiver types in frequency stability and selectivity. They offer much better stability than Tuned radio frequency receivers (TRF) because a tuneable oscillator is more easily stabilized than a tuneable amplifier, especially with modern frequency synthesizer technology. IF filters can give much narrower passbands at the same Q factor than an equivalent RF filter. A fixed IF also allows the use of a crystal filter when exceptionally high selectivity is necessary. Regenerative and super-regenerative receivers offer better sensitivity than a TRF receiver, but suffer from stability and selectivity problems.

In the case of modern television receivers, no other technique was able to produce the precise bandpass characteristic needed for vestigial sideband reception, first used with the original NTSC system introduced in 1941. This originally involved a complex collection of tuneable inductors which needed careful adjustment, but since the early 1980s these have been replaced with precision electromechanical surface acoustic wave (SAW) filters. Fabricated by precision laser milling techniques, SAW filters are much cheaper to produce, can be made to extremely close tolerances, and are extremely stable in operation.

Microprocessor technology allows replacing the superheterodyne receiver design by a software defined radio architecture, where the IF processing after the initial IF filter is implemented in software. This technique is already in use in certain designs, such as very low cost FM radios incorporated into mobile phones where the necessary microprocessor is already present in the system.

Radio transmitters may also use a mixer stage to produce an output frequency, working more or less as the reverse of a superheterodyne receiver.

[edit] Drawbacks
Drawbacks to the superheterodyne receiver include interference from signal frequencies close to the intermediate frequency. To prevent this, IF frequencies are generally controlled by regulatory

authorities, and this is the reason most receivers use common IFs. Examples are 455 kHz for AM radio, 10.7 MHz for FM, and 38.9 MHz (Europe) 45 MHz (US) for television.

(For AM radio, a variety of IFs have been used, but most of the Western World settled on 455kHz, in large part because of the almost universal transition to Japanese-made ceramic resonators which used the US standard of 455kHz. In more recent digitally tuned receivers, this was changed to 450kHz as this figure simplifies the design of the synthesizer circuitry).

Additionally, in urban environments with many strong signals, the signals from multiple transmitters may combine in the mixer stage to interfere with the desired signal.

[edit] High-side and low-side injection
The amount that a signal is down-shifted by the local oscillator depends on whether its frequency f is higher or lower than fLO. That is because its new frequency is |f - fLO| in either case. Therefore, there are potentially two signals that could both shift to the same fIF one at f = fLO + fIF and another at f = fLO - fIF. One or the other of those signals, called the image frequency, has to be filtered out prior to the mixer to avoid aliasing. When the upper one is filtered out, it is called high-side injection, because fLO is above the frequency of the received signal. The other case is called low-side injection. High-side injection also reverses the order of a signal's frequency components. Whether or not that actually changes the signal depends on whether it has spectral symmetry or not. The reversal can be undone later in the receiver, if necessary.

[edit] Image Frequency (fimage)
One major disadvantage to the superheterodyne receiver is the problem of image frequency. In heterodyne receivers, an image frequency is an undesired input frequency equal to the station frequency plus twice the intermediate frequency. The image frequency results in two stations being received at the same time, thus producing interference. Image frequencies can be eliminated by sufficient attenuation on the incoming signal by the RF amplifier filter of the superheterodyne receiver.

Early Autodyne receivers typically used IFs of only 150kHz or so, as it was difficult to maintain reliable oscillation if higher frequencies were used. As a consequence, most Autodyne receivers needed quite elaborate antenna tuning networks, often involving double-tuned coils, to avoid image interference. Later superhets used tubes especialy designed for oscillator/mixer use, which were able work reliably with much higher IFs, reducing th eproblem of image interference and so allowing simpler and cheaper aerial tuning circuitry.

[edit] Local oscillator radiation
It is difficult to keep stray radiation from the local oscillator

below the level that a nearby receiver can detect. This means that there can be mutual interference in the operation of two or more superheterodyne receivers in close proximity. In espionage, oscillator radiation gives a means to detect a covert receiver and its operating frequency.

Further information: Electromagnetic compatibility

[edit] Local oscillator sideband noise
Local oscillators typically generate a single frequency signal that has negligible amplitude modulation but some random phase modulation. Either of these impurities spreads some of the signal's energy into sideband frequencies. That causes a corresponding widening of the receiver's frequency response, which would defeat the aim to make a very narrow bandwidth receiver such as to receive low-rate digital signals. Care needs to be taken to minimize osicllator phase noise, usually by ensuring that the oscillator never enters a non-linear mode.

490. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-21 06:35:18 UTC
From: Phil Allison <philallison@tpg.com.au>
Message-ID: <7557p8F16npd0U1@mid.individual.net>
Source record: 2993
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"Greegor" <Greegor47@gmail.com>

> What specifically are your complaints with this Wiki ?

** What a fucking stupid thing to do - post an entire bloody 180KB Wiki
!!!

Even worse, the post is nor directed to anyone.

Greegor = MORON !!

..... Phil

491. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-21 08:01:42 UTC
From: Robert Baer <robertbaer@localnet.com>
Message-ID: <taqdnWXbhNru4HDUnZ2dnUVZ_vOdnZ2d@posted.localnet>
Source record: 2994
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Joerg wrote:

> John Larkin wrote:
>
>> On Mon, 20 Apr 2009 12:36:12 -0700, Joerg
>> <notthisjoergsch@removethispacbell.net> wrote:
>>
>>> Tim Shoppa wrote:
>>>
>>>> A terminology question I suppose about the derivation of the term
>>>> "Superheterodyne" more than anything else:
>>>>
>>>> Does the "Super" actually mean anything? Is there a Subheterodyne?
>>>>
>>>> Traditionally superhets mix a higher radio frequency down to a lower
>>>> IF frequency, but certainly in the past few decades radios with IF's
>>>> above the RF frequency have become very common in broadband
>>>> applications, and those are still called superhets, not subhets :-).
>>>>
>>>> Google turns up a couple hits on subheterodyne but other than one that
>>>> might mean "IF higher in frequency than RF" I don't recognize what
>>>> they mean..
>>>>
>>>> I suspect that "Super" was more a marketing term than anything
>>>> else :-).
>>>>
>>> If you want to file a new patent for old stuff you could try
>>> subheterodyne and it just might sail through :-)
>>>
>>> Oh wait, call it hyperheterodyne, has more glitz. Just like the
>>> supermercados in Spain.
>>
>>
>
> I meant hypermercados :-)
>
>
>> I think we're going to be doing a superhet receiver soon. Maybe we'll
>> do it in an FPGA!
>>
>
> How'd you do the preamp in there?
>

Bit shift?

492. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-21 12:24:17 UTC
From: TheM <DontNeedSpam@test.com>
Message-ID: <AUiHl.6549$ZY2.261740@news.siol.net>
Source record: 2995
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"Robert Baer" <robertbaer@localnet.com> wrote in message
news:taqdnWXbhNru4HDUnZ2dnUVZ_vOdnZ2d@posted.localnet...
> Joerg wrote:
>
>> John Larkin wrote:
>>
>>> On Mon, 20 Apr 2009 12:36:12 -0700, Joerg
>>> <notthisjoergsch@removethispacbell.net> wrote:
>>>
>>>> Tim Shoppa wrote:
>>>>
>>>>> A terminology question I suppose about the derivation of the term
>>>>> "Superheterodyne" more than anything else:
>>>>>
>>>>> Does the "Super" actually mean anything? Is there a Subheterodyne?
>>>>>
>>>>> Traditionally superhets mix a higher radio frequency down to a lower
>>>>> IF frequency, but certainly in the past few decades radios with IF's
>>>>> above the RF frequency have become very common in broadband
>>>>> applications, and those are still called superhets, not subhets :-).
>>>>>
>>>>> Google turns up a couple hits on subheterodyne but other than one that
>>>>> might mean "IF higher in frequency than RF" I don't recognize what
>>>>> they mean..
>>>>>
>>>>> I suspect that "Super" was more a marketing term than anything
>>>>> else :-).
>>>>>
>>>> If you want to file a new patent for old stuff you could try subheterodyne and it just
might sail through :-)
>>>>
>>>> Oh wait, call it hyperheterodyne, has more glitz. Just like the supermercados in
Spain.
>>>
>>>
>>
>> I meant hypermercados :-)
>>
>>
>>> I think we're going to be doing a superhet receiver soon. Maybe we'll
>>> do it in an FPGA!
>>>
>>
>>

>> How'd you do the preamp in there?
>>
> Bit shift?

Yes, but 2x zero is still zero... :)

M

493. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-21 12:34:25 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <a716def6-9cd2-48a8-b202-e408e7900ce1@k38g2000yqh.googlegroups.com>
Source record: 2996
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Apr 21, 1:05 am, "Phil Allison" <philalli...@tpg.com.au> wrote:
> "AF6AY"
>
> > Everyone ought to realize that "Wikipedia" data can be written by
> > ANYONE
>
> ** As are NG posts.
>
> The difference being that Wikis are full of checkable references and are
> subject to on-going correction.

The best Wikipedia articles are often filled with good checkable references, but other times it sounds like they were written in a foreign language and translated into English and have few (if any) good references.

Just because a Wikipedia entry isn't well-written or sounds awkward doesn't mean it's wrong, but I will often reject what I don't like in the poorly written ones.

Somewhere there's a bunch of people who spend their time correcting and improving Wikipedia entries, and I think overall they are doing a good job, but that doesn't mean the result is always devoted to my interests. Just like anything else in this world, it's got workers and it's got managers and they aren't always devoting their attention to the little corners of arcania that I live in.

It's not that the Encyclopedia Britannica is perfect either. I can open it up to the very few subjects that I happen to be expert on and find over-simplifications and a lack of cites to what I consider to be the best references. That doesn't mean it's out-and-out wrong, just that it's an Encyclopedia, and by definition they can't do anything but touch on the surface of all the interesting stuff in the world.

Of course in academia I got real used to opening a journal and instead of reading the articles, to go straight to the references and see if they are quoting one of my articles :-). Breadth vs specialization, can't pick them both.

Tim.

494. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-21 12:49:28 UTC
From: Phil Allison <philallison@tpg.com.au>
Message-ID: <755tmqF16oherU1@mid.individual.net>
Source record: 2997
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"Tim Shoppa"
"Phil Allison"

> > Everyone ought to realize that "Wikipedia" data can be written by
> > ANYONE
>
> ** As are NG posts.
>
> The difference being that Wikis are full of checkable references and are
> subject to on-going correction.

The best Wikipedia articles are often filled with good checkable
references, but other times it sounds like they were written in a
foreign language and translated into English

** Only indicates your lack of comprehension.

Just because a Wikipedia entry isn't well-written or sounds awkward

** You are irrationally obsessed with style over content.

Mostly likely because you cannot comprehend the content.

Somewhere there's a bunch of people who spend their time correcting
and improving Wikipedia entries, and I think overall they are doing a
good job, but that doesn't mean the result is always devoted to my
interests.

** What a revolting, pompous little narcissist you are - Tim.

Just like anything else in this world, it's got workers and
it's got managers and they aren't always devoting their attention to
the little corners of arcania that I live in.

** I was much too kind earlier ....

It's not that the Encyclopedia Britannica is perfect either. I can
open it up to the very few subjects that I happen to be expert on and
find over-simplifications and a lack of cites to what I consider to be
the best references.

** Mere narcissism has just turned into full blown ego-mania.

Of course in academia I got real used to opening a journal and instead
of reading the articles, to go straight to the references and see if
they are quoting one of my articles :-).

** Wot a nauseating computer geek puke.

..... Phil

495. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-21 13:23:45 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <a100ab99-e376-4fbd-9950-6b811457c392@k41g2000yqh.googlegroups.com>
Source record: 2998
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Apr 21, 2:02 am, Greegor <Greego...@gmail.com> wrote:
> What specifically are your complaints with this Wiki ?
>
> http://en.wikipedia.org/wiki/Superheterodyne_receiver

A 180 Kbyte article about a technology developed in the 1910's, yet the oldest reference is to a textbook from 1996 aimed at freshman or sophomore EE students of the 90's. More original references would have gone a long way, especially to the patents and journals of the 1910's and 1920's.

Don't get me wrong, it's a kinda nice textbook that they reference, as I realize that by the 90's many EE programs had been so entirely taken over by VLSI and CAD techniques and the particular textbook fills a very important niche in education. It isn't the textbook that I learned about radio from but I see how it fits the modern times well. (I prefer Terman or Clarke&Hess but those guys weren't around in 1918 either.).

A smaller point, is that the language sounds a lot like it was written in a language other than English and then translated. In principle this isn't fundamentally bad, it's just that a lot of the terminology used sounds very awkward. I think that's fine if they reference 80 year old patents using the same language, but they don't.

Tim.

496. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-21 13:26:25 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <ff1ed7d5-0843-4747-9ff8-79cf65f62664@n8g2000vbb.googlegroups.com>
Source record: 2999
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Apr 21, 8:49 am, "Phil Allison" <philalli...@tpg.com.au> wrote:
> ** Only indicates your lack of comprehension.
> ** You are irrationally obsessed with style over content.
> ** What a revolting, pompous little narcissist you are - Tim.
> ** I was much too kind earlier ....
> ** Mere narcissism has just turned into full blown ego-mania.
> ** Wot a nauseating computer geek puke.

There's a thin line between ignorance and arrogance, Phil. I have
erased that line.

Tim.

497. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-21 13:27:24 UTC
From: mikea <mikea@mikea.ath.cx>
Message-ID: <s6u0c6-b4n1.ln1@mikea.ath.cx>
Source record: 3000
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

In rec.radio.amateur.homebrew Phil Allison <philallison@tpg.com.au> wrote:
>
> "AF6AY"
>
>
>> Everyone ought to realize that "Wikipedia" data can be written by
>> ANYONE
>
> ** As are NG posts.
>
> The difference being that Wikis are full of checkable references and are
> subject to on-going correction.
>
>
>>The word prefix 'super' generally refers to something 'better' than
>> the word without that prefix.
>
>
> ** So this radio ham clot has no idea what the origin of the term is really
> is (although it has been posted) and is making the classic fuckwit
> BLUNDER of trying to de-cipher the meaning from the word alone.
>
>
>
>>Think also SUPERman.
>
> ** And supercilious.
>
>
>> 73, Len AF6AY
>> ex-ARRL member (for good reason)
>
>
> ** Lunatics like Len are not welcome as members ?

Killfile, Phil. Phil, killfile.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

498. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-21 14:00:26 UTC
From: Mike Silva <snarflemike@yahoo.com>
Message-ID: <324f9220-eb00-4fc5-a025-902eba9f62e9@x6g2000vbg.googlegroups.com>
Source record: 2901
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Apr 20, 12:50 pm, Tim Shoppa <sho...@trailing-edge.com> wrote:
> A terminology question I suppose about the derivation of the term
> "Superheterodyne" more than anything else:
>
> Does the "Super" actually mean anything? Is there a Subheterodyne?
>
> Traditionally superhets mix a higher radio frequency down to a lower
> IF frequency, but certainly in the past few decades radios with IF's
> above the RF frequency have become very common in broadband
> applications, and those are still called superhets, not subhets :-).
>
> Google turns up a couple hits on subheterodyne but other than one that
> might mean "IF higher in frequency than RF" I don't recognize what
> they mean..
>
> I suspect that "Super" was more a marketing term than anything
> else :-).
>
> Tim N3QE

Remember that his previous receiver invention, the regenerative
detector, would produce an audible heterodyne when used in the
oscillating-detector mode (for reception of CW, not AM signals). So
it would make sense for him to think of his new principle as producing
a supersonic heterodyne (IIRC around 50kHz or so).

And then there's the super regenerative detector, a regenerative
detector which is driven into and out of oscillation at (typically) a
supersonic frequency.

Mike

499. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-21 19:39:14 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2009.04.21.20.39.01.742398@example.net>
Source record: 2902
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Mon, 20 Apr 2009 23:02:59 -0700, Greegor wrote:
>
> A 5-tubes superhet receiver made in Japan about 1955.

Notwithstanding I didn't see this line at
http://en.wikipedia.org/wiki/Superheterodyne_receiver ,
when I was a kid, we had an "All-American Five" WELL before 1955.
http://en.wikipedia.org/wiki/All_American_Five

Hope This Helps!
Rich

500. Re: nixie driver

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-21 21:34:28 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <HZqHl.15082$%54.14719@nlpi070.nbdc.sbc.com>
Source record: 2903

JIMMIE wrote:
> On Apr 19, 2:00 pm, Bruce W. Ellis <el...@means.net> wrote:
>> On Wed, 8 Apr 2009 06:51:53 -0700 (PDT), Tim Shoppa
>>
>>
>>
>>
>>
>> <sho...@trailing-edge.com> wrote:
>>> On Apr 3, 10:34 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
>>>> I have a Systron Donner frequency counter that uses Nixie tubes. The
>>>> counter works fine but I am forever replacing the Nixie drivers
>>>> 74141s. I started to use it this AM an one was out. Is there a
>>>> replacement for the 74141, I couldnt find one, or is there a circuit I
>>>> could build on a DIP header to replace them. I could probably design
>>>> one but I wanted something tried an tested as I dont want to put my
>>>> counter board at more risk than I have to.
>>> Domestic 74141's are hard to find these days but on E-bay the Russian
>>> equivalent is very common.
>>> Yes, you could build just about anything with a one-of-ten decoder and
>>> some current-sink drivers to do the same.
>>> If the goal isn't nixie tubes but is a working frequency counter, you
>>> could probably put the counter up on E-bay for somebody who wants
>>> nixie tubes, and use the money to buy several superior frequency
>>> counters.
>>> Tim N3QE
>> Just remember to cut down on the voltage and current to the nixie
>> tubes and the 141s will last forever...
>>
>> Bruce W0BF- Hide quoted text -
>>
>> - Show quoted text -
>
> Thanks all for the input. I managed to cut the voltage back from about
> 210VDC to 185VDC and the display still looks good, the change in
> brightness was barely discernable. It may take a while to see if this
> helped. What voltage do you normally run on nixies. I wish I had more
> data on the nixies but I dont have a part number.
>

Yikes, 210V sounds high. I just took a look at the old 1985 databook
from TI. It does not state an abs max off-state voltage but under
recommended operating conditions it says 60V. If memory serves me right
mine used to run around 150V.

This datasheet says 60V minimum and it appears there are zeners built in that limit what the 74141 output transistor sees:

http://wiki.cecs.pdx.edu/pub/JoeProjects/NixieClock/74141.pdf

Probably that zener is low enough in voltage not to fry the transistor yet high enough that the nixie element will extinguish. BTW there are lots of 74141 on Ebay for around $0.50-$1.00 in medium quantities. Looks like they are from Russia.

--
73, Joerg

501. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-21 21:46:47 UTC
From: AF6AY <LenAnderson@ieee.org>
Message-ID: <9b3d591c-39b0-45d9-85e0-7277039882d3@x5g2000yqk.googlegroups.com>
Source record: 2904
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Apr 21, 5:34 am, Tim Shoppa <sho...@trailing-edge.com> wrote:
> On Apr 21, 1:05 am, "Phil Allison" <philalli...@tpg.com.au> wrote:
>
> > "AF6AY"
>
> > > Everyone ought to realize that "Wikipedia" data can be written by
> > > ANYONE
>
> > ** As are NG posts.
>
> > The difference being that Wikis are full of checkable references and are
> > subject to on-going correction.
>
> The best Wikipedia articles are often filled with good checkable
> references, but other times it sounds like they were written in a
> foreign language and translated into English and have few (if any)
> good references.

One can write just about anything so that it looks good and
authentic. :-)

There is plenty of rather authentic information on Edward Howard
Armstrong, including scans of Armstrong's patents.

As to the words "supersonic" and "subsonic" I doubt that those were
coined
prior to around 1930, rather long after the superheterodyne came into
being as the very model of a modern major receiver structure.

Argument over the 'super' prefix/designator would come a cropper on
things
like the super-regenerative receiver which use a sort of burst
oscillation at
frequencies quite higher than young adult hearing maximum of 15 KHz,
i.e., "supersonic" in terms of frequency. In aerospace, "supersonic"
is a term for going faster than the speed of sound.

As to "typically converting the signal frequency below the range of
tuning," that WAS true but it applies only to most superhets that were
designed prior to WWII (at least 60 years ago). Those mixers used
only the difference frequency output while the sum frequency output
just dissipated internally. That changed with UP-conversion, notably
in Collins Radio designs for their lowest selectable bands, then in
the first wideband spectrum analyzers covering a full GHz in one

sweep. Those early spectrum analyzers would up-convert 0 to 1 GHz to a 2 GHz first IF, then down-convert from there. 2 GHz is so far above 'supersonic' that it would be a misuse of it.

> Somewhere there's a bunch of people who spend their time correcting
> and improving Wikipedia entries, and I think overall they are doing a
> good job, but that doesn't mean the result is always devoted to my
> interests. Just like anything else in this world, it's got workers and
> it's got managers and they aren't always devoting their attention to
> the little corners of arcania that I live in.

There's also a lot more folks who just vent their frustrations on everyone else, such as Phil Allison (who's profile can't be accessed because he violated the Terms of Service on Google).

As to the ORIGIN of technical terms, speaking as a lifetime engineer and technician and worker IN engineering, it matters little as to etymology but a great deal more on the SUBJECT the word is referring to.

If anyone wants to think "supersonic" applied in 1918 to anything at all, then they are welcome to point out the "supersonic" aircraft of that time...made of pieces of steel, wood, wire, and fabric. :-) It was a long time between 1918 and 1947 when the first aircraft broke the 'sound barrier' (Bell X-1 piloted by Chuck Yeager).

73, Len AF6AY

502. Re: nixie driver

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-21 22:07:25 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <zsrHl.28160$YU2.24589@nlpi066.nbdc.sbc.com>
Source record: 2905

Bruce W. Ellis wrote:
> On Wed, 8 Apr 2009 06:51:53 -0700 (PDT), Tim Shoppa
> <shoppa@trailing-edge.com> wrote:
>
>> On Apr 3, 10:34 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
>>> I have a Systron Donner frequency counter that uses Nixie tubes. The
>>> counter works fine but I am forever replacing the Nixie drivers
>>> 74141s. I started to use it this AM an one was out. Is there a
>>> replacement for the 74141, I couldnt find one, or is there a circuit I
>>> could build on a DIP header to replace them. I could probably design
>>> one but I wanted something tried an tested as I dont want to put my
>>> counter board at more risk than I have to.
>> Domestic 74141's are hard to find these days but on E-bay the Russian
>> equivalent is very common.
>>
>> Yes, you could build just about anything with a one-of-ten decoder and
>> some current-sink drivers to do the same.
>>
>> If the goal isn't nixie tubes but is a working frequency counter, you
>> could probably put the counter up on E-bay for somebody who wants
>> nixie tubes, and use the money to buy several superior frequency
>> counters.
>>
>> Tim N3QE
>
> Just remember to cut down on the voltage and current to the nixie
> tubes and the 141s will last forever...
>

One risk with such chips is that a nixie element occasionally reaches
strike voltage while the respective driver output is off. Or doesn't
extinguish right away when turned off. Then the dissipation in the 55V
zeners inside might be too much to stomach for the little chip.
According to the datasheet those things aren't really high voltage switches.

--
73, Joerg

503. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-21 23:14:27 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <xlsHl.31995$qa.18506@bignews4.bellsouth.net>
Source record: 2906
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Jean-Christophe wrote:
> On Apr 20, 5:50 pm, Tim Shoppa <sho...@trailing-edge.com> wrote:
>> A terminology question I suppose about the derivation of the term
>> "Superheterodyne" more than anything else:
>>
>> Does the "Super" actually mean anything? Is there a Subheterodyne?
>> Traditionally superhets mix a higher radio frequency down to a lower
>> IF frequency, but certainly in the past few decades radios with IF's
>> above the RF frequency have become very common in broadband
>> applications, and those are still called superhets, not subhets :-).
>> Google turns up a couple hits on subheterodyne but other than one that
>> might mean "IF higher in frequency than RF" I don't recognize what
>> they mean..
>
> A superheterodyne can be Supradyne or Infradyne,
> depending of the IF against the RF.
>
>> I suspect that "Super" was more a marketing term than anything
>> else :-).
>
> I don't superthink so.
There was a type of circuit called the 'heterodyne', which is actually
just a direct conversion receiver. Adding the IF stage made it a
'super' heterodyne.

Also remember the 'super-regenerative' circuit? That was an improvement
over the regenerative receiver in that feedback could be increased past
the self oscillation point to get even more gain via the use of a
supersonic quench oscillator. So maybe the prefex DOES refer to supersonic.

504. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-21 23:22:19 UTC
From: ken scharf <wa2mzeNOSPAMBOTS@bellsouth.net>
Message-ID: <VssHl.31998$qa.20466@bignews4.bellsouth.net>
Source record: 2907
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

```
P>
>> Is there a Subheterodyne?
>
> ** No.
>
But if you wind your tickler coil bass-ackwards you end up
with a degenerative receiver circuit.
```

505. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-22 00:35:50 UTC
From: Phil Allison <philallison@tpg.com.au>
Message-ID: <757736F16phubU1@mid.individual.net>
Source record: 2908
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"AF6AY" = radio ham nutter

One can write just about anything so that it looks good and
authentic. :-)

** Shame how that leaves this retarded old ham out in the cold.

As to the words "supersonic" and "subsonic" I doubt that those were
coined prior to around 1930,

** So the clot has no idea what terms were in use back then at all - but
it suits him to pretend that he knows.

What a hee-hawing bloody ASS.

...... Phil

506. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-22 00:38:47 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <tGtHl.25165$c45.16415@nlpi065.nbdc.sbc.com>
Source record: 2909
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

TheM wrote:
> "Robert Baer" <robertbaer@localnet.com> wrote in message
news:taqdnWXbhNru4HDUnZ2dnUVZ_vOdnZ2d@posted.localnet...
>> Joerg wrote:
>>
>>> John Larkin wrote:
>>>
>>>> On Mon, 20 Apr 2009 12:36:12 -0700, Joerg
>>>> <notthisjoergsch@removethispacbell.net> wrote:
>>>>
>>>>> Tim Shoppa wrote:
>>>>>
>>>>>> A terminology question I suppose about the derivation of the term
>>>>>> "Superheterodyne" more than anything else:
>>>>>>
>>>>>> Does the "Super" actually mean anything? Is there a Subheterodyne?
>>>>>>
>>>>>> Traditionally superhets mix a higher radio frequency down to a lower
>>>>>> IF frequency, but certainly in the past few decades radios with IF's
>>>>>> above the RF frequency have become very common in broadband
>>>>>> applications, and those are still called superhets, not subhets :-).
>>>>>>
>>>>>> Google turns up a couple hits on subheterodyne but other than one that
>>>>>> might mean "IF higher in frequency than RF" I don't recognize what
>>>>>> they mean..
>>>>>>
>>>>>> I suspect that "Super" was more a marketing term than anything
>>>>>> else :-).
>>>>>>
>>>>> If you want to file a new patent for old stuff you could try subheterodyne and it
just might sail through :-)
>>>>>
>>>>> Oh wait, call it hyperheterodyne, has more glitz. Just like the supermercados in
Spain.
>>>>
>>> I meant hypermercados :-)
>>>
>>>
>>>> I think we're going to be doing a superhet receiver soon. Maybe we'll
>>>> do it in an FPGA!
>>>>
>>> How'd you do the preamp in there?
>>>

>> Bit shift?
>
> Yes, but 2x zero is still zero... :)
>
> M

... +/-3dB.

--
Regards, Joerg

http://www.analogconsultants.com/

"gmail" domain blocked because of excessive spam.
Use another domain or send PM.

507. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-22 00:43:29 UTC
From: Phil Allison <philallison@tpg.com.au>
Message-ID: <7577hhF15ouijU1@mid.individual.net>
Source record: 2910
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"Tim Shoppa the Wanker "
Greegor the Geek
> What specifically are your complaints with this Wiki ?
>
> http://en.wikipedia.org/wiki/Superheterodyne_receiver

A 180 Kbyte article about a technology developed in the 1910's,

** Irrelevant when it was first developed - cos it is still current tech.

The article is not pretending to be being a history lesson.

A smaller point, is that the language sounds a lot like it was written
in a language other than English and then translated.

** That is an utterly absurd idea.

Smacks of paranoid schizophrenia.

Shoppa has completely lost it.

..... Phil

508. Tim Shoppa the Shithead Troll

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-22 00:54:07 UTC
From: Phil Allison <philallison@tpg.com.au>
Message-ID: <75785fF16246sU1@mid.individual.net>
Source record: 2911
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"Tim Shoppa the Shithead Troll "

> > Everyone ought to realize that "Wikipedia" data can be written by
> > ANYONE
>
> ** As are NG posts.
>
> The difference being that Wikis are full of checkable references and are
> subject to on-going correction.

The best Wikipedia articles are often filled with good checkable
references, but other times it sounds like they were written in a
foreign language and translated into English

** Only indicates your lack of comprehension.

Just because a Wikipedia entry isn't well-written or sounds awkward

** You are irrationally obsessed with style over content.

Mostly likely because you cannot comprehend the content.

Somewhere there's a bunch of people who spend their time correcting
and improving Wikipedia entries, and I think overall they are doing a
good job, but that doesn't mean the result is always devoted to my
interests.

** What a revolting, pompous little narcissist you are - Tim.

Just like anything else in this world, it's got workers and
it's got managers and they aren't always devoting their attention to
the little corners of arcania that I live in.

** I was much too kind earlier ....

It's not that the Encyclopedia Britannica is perfect either. I can
open it up to the very few subjects that I happen to be expert on and
find over-simplifications and a lack of cites to what I consider to be
the best references.

** Mere narcissism has just turned into full blown ego-mania.

Of course in academia I got real used to opening a journal and instead
of reading the articles, to go straight to the references and see if
they are quoting one of my articles :-).

** Wot a nauseating computer geek puke.

..... Phil

509. Re: Tim Shoppa the Shithead Troll

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-22 01:47:04 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1f7e0374-bccd-4a23-bf58-9cd66e16fbe0@x3g2000yqa.googlegroups.com>
Source record: 2912
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Apr 21, 5:54 pm, "Phil Allison" <philalli...@tpg.com.au> wrote:
> ** Only indicates your lack of comprehension.
> ** You are irrationally obsessed with style over content.
> ** What a revolting, pompous little narcissist you are -
> ** I was much too kind earlier ....
> ** Mere narcissism has just turned into full blown ego-mania.
> ** Wot a nauseating computer geek puke.

There is a thin line between ignorance and arrogance, Phil. I have
erased that line!

Tim.

510. Re: XTAL Radio Receiver Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-22 01:47:22 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <75703417-7862-44fb-b43f-11e09f7e9e17@w35g2000prg.googlegroups.com>
Source record: 2913

On Apr 20, 6:20 pm, Tim Wescott <t...@seemywebsite.com> wrote:
> David wrote:
> > Looking for Crystal Radio Receiver Circuits, that have a voltage
> > quadrupler to increase headphone volume without batteries or AC power.
>
> If you are quadrupling the voltage at the headphones, then you are, of
> necessity, dividing the impedance at the detector by a factor of 16.
>
> You only have so much power available at the antenna; a detector
> followed by an unpowered "voltage quadrupler" won't extract any more
> power than any other equivalently-well-matched detector, and so won't
> put any more power to the headphones.
>
> If you really want to do this passively, and not rely on some near-by
> strong station for power, then you need to optimize your circuit and
> headphones for efficiency, and you need to get a _lot_ of wire into the air.
>
> --
>
> Tim Wescott
> Wescott Design Serviceshttp://www.wescottdesign.com
>
> Do you need to implement control loops in software?
> "Applied Control Theory for Embedded Systems" was written for you.
> See details athttp://www.wescottdesign.com/actfes/actfes.html

Hey OM:

What you claim may be true, but if I use a pair of 2000 ohm headphones
and have 100 millivolts into those phones, I would developed a power
into those headphones of 5 microwatts. Now if the voltage goes up 4
times to 400 millivolts the power developed into the phones is 80
microwatts. So it don't matter what the detector impedance is. The
headphones don't care what the impedance is, in this case.

Now if the detector impedance was 10,000 ohms then you have a
problem.

So basically is it optimized for say Edison electric to run a 50 amp
main to my house when I only use a 100 watt light bulb? The source
impedance is a lot lower than my 100 watt light bulb.

Don't forget a good ground connection also.

73 OM

de N8ZU

511. Re: XTAL Radio Receiver Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-22 02:00:35 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <d3d8de38-56df-4166-ae8a-f0e4512f525f@y33g2000prg.googlegroups.com>
Source record: 2914

On Apr 20, 7:40 pm, Paul Keinanen <keina...@sci.fi> wrote:
> On Mon, 20 Apr 2009 11:34:49 -0700 (PDT), David <DavidBR...@gmail.com>
> wrote:
>
> >Looking for Crystal Radio Receiver Circuits, that have a voltage
> >quadrupler to increase headphone volume without batteries or AC power.
>
> I assume you are talking about a broadcast receiver for frequencies
> below 1600 kHz. At such frequencies and with a typical 500 pF variable
> capacitor, the impedance levels for an LC resonant circuit is quite
> high.
>
> Loading it with a crystal detector and some low impedance (30 or less)
> headphone will load the resonant circuit quite heavily, reducing the
> output quite heavily.
>
> In the old days, the typical impedance of a headphone might have been
> about 2000 ohms, loading the resonant circuit much less. In order to
> cause a similar loading to the resonant circuit using current
> headphones, you need an audio transformer with 2000:30 impedance ratio
> or 8:1 turns ratio.
>
> Paul OH3LWR

Hey OM

I know they still make 2000 ohm headphones, Philmore still makes them,
then there is a crystal headphone.
A crystal headphone you can make yourself. It''s just a crystal
microphone in reverse. I seen the QST article on how to make a crystal
microphone.

But the best bar none, is a balanced armature headphones, those things
are self powered, or so they say. And balanced armature headphones
cost an arm and a leg too.

73 OM

de n8zu

512. Tim Shoppa the Autistic Troll

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-22 02:03:07 UTC
From: Phil Allison <philallison@tpg.com.au>
Message-ID: <757c6tF16tn21U1@mid.individual.net>
Source record: 2915
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"Tim Shoppa = Autistic Troll "

The best Wikipedia articles are often filled with good checkable
references, but other times it sounds like they were written in a
foreign language and translated into English

** Only indicates an autistic lack of comprehension.

Just because a Wikipedia entry isn't well-written or sounds awkward

** You are autistically obsessed with imaginary flaws in the writing.

Mostly likely because you have gone quite insane.

Somewhere there's a bunch of people who spend their time correcting
and improving Wikipedia entries, and I think overall they are doing a
good job, but that doesn't mean the result is always devoted to my
interests.

** What a revolting, pompous narcissistic pig you are - Tim.

Just like anything else in this world, it's got workers and
it's got managers and they aren't always devoting their attention to
the little corners of arcania that I live in.

** I was much too kind earlier ....

It's not that the Encyclopedia Britannica is perfect either. I can
open it up to the very few subjects that I happen to be expert on and
find over-simplifications and a lack of cites to what I consider to be
the best references.

** Mere narcissism has just turned into full blown, autistic ego-mania.

Of course in academia I got real used to opening a journal and instead
of reading the articles, to go straight to the references and see if
they are quoting one of my articles :-).

** Shoppa's self delusions have made him a legend in his own mind.

When all he really has become is " history ".

..... Phil

513. Re: Headphone Impedance

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-22 02:19:06 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <757ef230-3bbd-4de6-9126-2fa6f772f0d2@y6g2000prf.googlegroups.com>
Source record: 2916

On Apr 20, 5:46 pm, David <DavidBR...@gmail.com> wrote:
> After measuring the headphones with an LCR meter, is there a way to
> take the inductance, capacitance and resistance to find the AC
> impedance of the headphones at 1KHZ?

Hay OM:

I wondered what the impedance of a crystal headphone would be. I guess just the capacitance and inductance of the wire going to the crystal. And at 1000 cycles that would be way up there.

I can bet for a certainty that 32 ohm headphones will be 32 ohms of impedance at 1000 cycles. Just think how much the inductance and capacitance will figure into the equation? Under 1% I bet at 1000 cycles.

73 OM

de n8zu

514. Re: XTAL Radio Receiver Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-22 03:14:47 UTC
From: Bill M <radioexray@geeemail.com>
Message-ID: <gsm23e0qvc@news3.newsguy.com>
Source record: 2917

raypsi wrote:

> Hey OM:
>
> What you claim may be true, but if I use a pair of 2000 ohm headphones
> and have 100 millivolts into those phones, I would developed a power
> into those headphones of 5 microwatts. Now if the voltage goes up 4
> times to 400 millivolts the power developed into the phones is 80
> microwatts. So it don't matter what the detector impedance is. The
> headphones don't care what the impedance is, in this case.

Yes it does. And no, your math is wrong. Phones don't respond to watts.

In a simple crystal radio the voltage is gained by NOT loading down the preceeding circuit. If you load down a simple LC circuit with a doubler/quadrupler as opposed to 'one clean diode' then you lose more than you gain. And you take an additional hit on selectivity because the Q of the RF circuit becomes loaded excessively. Thats why the doubler/quadrupler schemes that look good on paper don't pass muster with xtal radio enthusiasts.

Detector impedance, headphone impedance are the meat and potatoes in "dx" crystal radio circuits. Its a house of mirrors, so to speak. Poor impedance match at the fones will kill RF selectivity, for example. Yes, you have to look at it that way.

Doesn't matter much with a Rocket Radio or a Cub Scout radio but if you get into the high end of xtal sets its very important.

-Bill

515. Re: Headphone Impedance

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-22 03:22:20 UTC
From: Bill M <radioexray@geeemail.com>
Message-ID: <gsm2hi0rb1@news3.newsguy.com>
Source record: 2918

raypsi wrote:
> On Apr 20, 5:46 pm, David <DavidBR...@gmail.com> wrote:
>> After measuring the headphones with an LCR meter, is there a way to
>> take the inductance, capacitance and resistance to find the AC
>> impedance of the headphones at 1KHZ?
>
> Hay OM:
>
> I wondered what the impedance of a crystal headphone would be. I guess
> just the capacitance and inductance of the wire going to the crystal.
> And at 1000 cycles that would be way up there.
>
> I can bet for a certainty that 32 ohm headphones will be 32 ohms of
> impedance at 1000 cycles. Just think how much the inductance and
> capacitance will figure into the equation? Under 1% I bet at 1000
> cycles.
>
> 73 OM
>
> de n8zu

Impedance of xtal phones is often in the 10s of k. But their efficiency
stinks.

Regular old-time "2k" phones ohm out pretty close to 2k in DC
resistance and their impedance is in that same ballpark. They are all
over the place nowadays . May be fine on a regen set but suck horribly
on a crystal set.

516. Re: nixie driver

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-22 03:40:01 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <576cfe9d-fd3b-42ea-992d-9f3b95d166be@f19g2000yqh.googlegroups.com>
Source record: 2919

On Apr 21, 6:07 pm, Joerg <notthisjoerg...@removethispacbell.net>
wrote:
> Bruce W. Ellis wrote:
> > On Wed, 8 Apr 2009 06:51:53 -0700 (PDT), Tim Shoppa
> > <sho...@trailing-edge.com> wrote:
>
> >> On Apr 3, 10:34 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> >>> I have a Systron Donner frequency counter that uses Nixie tubes. The
> >>> counter works fine but I am forever replacing the Nixie drivers
> >>> 74141s. I started to use it this AM an one was out. Is there a
> >>> replacement for the 74141, I couldnt find one, or is there a circuit I
> >>> could build on a DIP header to replace them. I could probably design
> >>> one but I wanted something tried an tested as I dont want to put my
> >>> counter board at more risk than I have to.
> >> Domestic 74141's are hard to find these days but on E-bay the Russian
> >> equivalent is very common.
>
> >> Yes, you could build just about anything with a one-of-ten decoder and
> >> some current-sink drivers to do the same.
>
> >> If the goal isn't nixie tubes but is a working frequency counter, you
> >> could probably put the counter up on E-bay for somebody who wants
> >> nixie tubes, and use the money to buy several superior frequency
> >> counters.
>
> >> Tim N3QE
>
> > Just remember to cut down on the voltage and current to the nixie
> > tubes and the 141s will last forever...
>
> One risk with such chips is that a nixie element occasionally reaches
> strike voltage while the respective driver output is off. Or doesn't
> extinguish right away when turned off. Then the dissipation in the 55V
> zeners inside might be too much to stomach for the little chip.
> According to the datasheet those things aren't really high voltage switches.
>
> --
> 73, Joerg- Hide quoted text -
>
> - Show quoted text -

The current limiting resistor going to the tubes is 39K. Im going to
increase that to 47K and see what happens. After putting in new chips
it may be months to a year before I see another problem with it. I

wish I knew what I was up against if I had a schematic, knew what the voltages were supposed to be it would help greatly. I bought one a surplus from where I work and from what I heard of its history it had ths problem for along time. The second one I got ws at a hamfest and it too seems to have the same problem. Could it be bad nixie tubes?

Jimmie

517. Re: XTAL Radio Receiver Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-22 03:56:50 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <a28cb646-5ebd-4d82-92e8-1595a364fab8@y10g2000prc.googlegroups.com>
Source record: 2920

On Apr 21, 11:14 pm, Bill M <radioex...@geeemail.com> wrote:

>. Phones don't respond to watts.

> -Bill

Hey OM:

Thanks for the sardonic epiphany.

73 OM

de n8zu

518. Re: nixie driver

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-22 04:02:04 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <162a4625-cefe-4929-9edc-75370829209f@j18g2000yql.googlegroups.com>
Source record: 2921

On Apr 21, 11:40 pm, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> On Apr 21, 6:07 pm, Joerg <notthisjoerg...@removethispacbell.net>
> wrote:
>
>
>
>
>
> > Bruce W. Ellis wrote:
> > > On Wed, 8 Apr 2009 06:51:53 -0700 (PDT), Tim Shoppa
> > > <sho...@trailing-edge.com> wrote:
>
> > > > On Apr 3, 10:34 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> > > > > I have a Systron Donner frequency counter that uses Nixie tubes. The
> > > > > counter works fine but I am forever replacing the Nixie drivers
> > > > > 74141s. I started to use it this AM an one was out. Is there a
> > > > > replacement for the 74141, I couldnt find one, or is there a circuit I
> > > > > could build on a DIP header to replace them. I could probably design
> > > > > one but I wanted something tried an tested as I dont want to put my
> > > > > counter board at more risk than I have to.
> > > > Domestic 74141's are hard to find these days but on E-bay the Russian
> > > > equivalent is very common.
>
> > > > Yes, you could build just about anything with a one-of-ten decoder and
> > > > some current-sink drivers to do the same.
>
> > > > If the goal isn't nixie tubes but is a working frequency counter, you
> > > > could probably put the counter up on E-bay for somebody who wants
> > > > nixie tubes, and use the money to buy several superior frequency
> > > > counters.
>
> > > > Tim N3QE
>
> > > > Just remember to cut down on the voltage and current to the nixie
> > > > tubes and the 141s will last forever...
>
> > One risk with such chips is that a nixie element occasionally reaches
> > strike voltage while the respective driver output is off. Or doesn't
> > extinguish right away when turned off. Then the dissipation in the 55V
> > zeners inside might be too much to stomach for the little chip.
> > According to the datasheet those things aren't really high voltage switches.
>
> > --
> > 73, Joerg- Hide quoted text -

>
> > - Show quoted text -
>
> The current limiting resistor going to the tubes is 39K. Im going to
> increase that to 47K and see what happens. After putting in new chips
> it may be months to a year before I see another problem with it. I
> wish I knew what I was up against if I had a schematic, knew what the
> voltages were supposed to be it would help greatly. I bought one a
> surplus from where I work and from what I heard of its history it had
> ths problem for along time. The second one I got ws at a hamfest and
> it too seems to have the same problem. Could it be bad nixie tubes?
>
> Jimmie- Hide quoted text -
>
> - Show quoted text -

nixies are a burroughs 57505s and some other not readable type.
Ican make out the word "electronics" and the number "7341"
Interestingly these are the ones I dont have a problem with. Maybe I
have found my problem. Now to find a solution. Where can I find these
nxies?

Jimmie

519. Re: Tim Shoppa the Shithead Troll

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-22 05:07:03 UTC
From: Archimedes' Lever <OneBigLever@InfiniteSeries.Org>
Message-ID: <ae9tu45bl55i5d62r46842f3pudc3apktu@4ax.com>
Source record: 2922
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Wed, 22 Apr 2009 10:54:07 +1000, "Phil Allison"
<philallison@tpg.com.au> wrote:

>"Tim Shoppa the Shithead Troll "
>

NO, PHIL... You dumbfuck!

YOU are the SHITHEAD and YOU are the STUPID fucking TROLL!

520. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-22 09:32:36 UTC
From: Bill Palmer <Biiil@none.not>
Message-ID: <i0ptu4l5intmj0grbakbhhhiihl06aei1c@4ax.com>
Source record: 2923
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Tue, 21 Apr 2009 08:27:24 -0500 mikea <mikea@mikea.ath.cx> wrote in
Message id: <s6u0c6-b4n1.ln1@mikea.ath.cx>:

[...]

>Killfile, Phil. Phil, killfile.

What took you so long?

521. Re: Tim Shoppa the Autistic Troll

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-22 12:24:57 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <3aa27212-5ae2-4aaa-b7c4-c165bb761532@f19g2000yqo.googlegroups.com>
Source record: 2924
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Apr 21, 10:03 pm, "Phil Allison" <philalli...@tpg.com.au> wrote:
> ** Only indicates an autistic lack of comprehension.
> ** You are autistically obsessed with imaginary flaws in the writing.
> ** Mostly likely because you have gone quite insane.
> ** What a revolting, pompous narcissistic pig you are - Tim.
> ** I was much too kind earlier ....
> ** Mere narcissism has just turned into full blown, autistic ego-mania.
> ** Shoppa's self delusions have made him a legend in his own mind.
> ** When all he really has become is " history ".

You forgot to add, Phil, that my mother was a hamster and my father
smelt of eldeberries.

Tim.

522. Re: nixie driver

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-22 12:45:17 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <CjEHl.27604$yr3.1657@nlpi068.nbdc.sbc.com>
Source record: 2925

JIMMIE wrote:
> On Apr 21, 6:07 pm, Joerg <notthisjoerg...@removethispacbell.net>
> wrote:
>> Bruce W. Ellis wrote:
>>> On Wed, 8 Apr 2009 06:51:53 -0700 (PDT), Tim Shoppa
>>> <sho...@trailing-edge.com> wrote:
>>>> On Apr 3, 10:34 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
>>>>> I have a Systron Donner frequency counter that uses Nixie tubes. The
>>>>> counter works fine but I am forever replacing the Nixie drivers
>>>>> 74141s. I started to use it this AM an one was out. Is there a
>>>>> replacement for the 74141, I couldnt find one, or is there a circuit I
>>>>> could build on a DIP header to replace them. I could probably design
>>>>> one but I wanted something tried an tested as I dont want to put my
>>>>> counter board at more risk than I have to.
>>>> Domestic 74141's are hard to find these days but on E-bay the Russian
>>>> equivalent is very common.
>>>> Yes, you could build just about anything with a one-of-ten decoder and
>>>> some current-sink drivers to do the same.
>>>> If the goal isn't nixie tubes but is a working frequency counter, you
>>>> could probably put the counter up on E-bay for somebody who wants
>>>> nixie tubes, and use the money to buy several superior frequency
>>>> counters.
>>>> Tim N3QE
>>> Just remember to cut down on the voltage and current to the nixie
>>> tubes and the 141s will last forever...
>> One risk with such chips is that a nixie element occasionally reaches
>> strike voltage while the respective driver output is off. Or doesn't
>> extinguish right away when turned off. Then the dissipation in the 55V
>> zeners inside might be too much to stomach for the little chip.
>> According to the datasheet those things aren't really high voltage switches.
>>
>> --
>> 73, Joerg- Hide quoted text -
>>
>> - Show quoted text -
>
> The current limiting resistor going to the tubes is 39K. Im going to
> increase that to 47K and see what happens. After putting in new chips
> it may be months to a year before I see another problem with it. I
> wish I knew what I was up against if I had a schematic, knew what the
> voltages were supposed to be it would help greatly. I bought one a
> surplus from where I work and from what I heard of its history it had
> ths problem for along time. The second one I got ws at a hamfest and
> it too seems to have the same problem. Could it be bad nixie tubes?

>

Unlikely, when nixies go bad they become dim, then at some point elements fail to strike at all. It's just that the 210V you mentioned in another post sounds unusually high. Leaves a whopping 150V between that and the 55-60V zener in the output of the 74141. My nixies would light at that voltage. So if you'd have one that occasionally lit or stayed lit and drew, say, 3ma then that results in 150mW dissipation in a very tiny area of the chip ... phsssst ... phut ... gone. When pulling down to near GND the chips can sink that current forever but not if 60V are dropped.

But all this is speculation because we both don't know what kind of nixies are in there and what the voltage was designed to be.

--
73, Joerg

523. Tim Shoppa= Autistic Troll

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-22 13:24:37 UTC
From: Phil Allison <philallison@tpg.com.au>
Message-ID: <758k4lF1718gbU1@mid.individual.net>
Source record: 2926
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"Tim Shoppa = Autistic Troll "

The best Wikipedia articles are often filled with good checkable
references, but other times it sounds like they were written in a
foreign language and translated into English

** Only indicates an autistic lack of comprehension.

Just because a Wikipedia entry isn't well-written or sounds awkward

** You are autistically obsessed with imaginary flaws in the writing.

Most likely because you have gone quite insane.

Somewhere there's a bunch of people who spend their time correcting
and improving Wikipedia entries, and I think overall they are doing a
good job, but that doesn't mean the result is always devoted to my
interests.

** What a revolting, pompous narcissistic pig you are - Tim.

Just like anything else in this world, it's got workers and
it's got managers and they aren't always devoting their attention to
the little corners of arcania that I live in.

** I was much too kind earlier ....

It's not that the Encyclopedia Britannica is perfect either. I can
open it up to the very few subjects that I happen to be expert on and
find over-simplifications and a lack of cites to what I consider to be
the best references.

** Mere narcissism has just turned into full blown, autistic ego-mania.

Of course in academia I got real used to opening a journal and instead
of reading the articles, to go straight to the references and see if
they are quoting one of my articles :-).

** Shoppa's self delusions have made him a legend in his own mind.

When all he really has become is " history ".

..... Phil

524. Re: Tim Shoppa the Autistic Troll

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-22 14:01:33 UTC
From: John O'Flaherty <quiasmox@yeeha.com>
Message-ID: <5p8uu45ben95hk2om300nevvc7g5oucqhp@4ax.com>
Source record: 2927
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Wed, 22 Apr 2009 05:24:57 -0700 (PDT), Tim Shoppa
<shoppa@trailing-edge.com> wrote:

>On Apr 21, 10:03ï¿½pm, "Phil Allison" <philalli...@tpg.com.au> wrote:
>> ** Only indicates an autistic lack of comprehension.
>> ** You are autistically obsessed with imaginary flaws in the writing.
>> **ï¿½ Mostly likely because you have gone quite insane.
>> ** What a revolting, pompous narcissistic pig you are ï¿½- ï¿½Tim.
>> ** ï¿½I was much too kind earlier ....
>> ** Mere narcissism has just turned into full blown, autistic ego-mania.
>> ** ï¿½Shoppa's self delusions have made him a legend in his own mind.
>> ** ï¿½When all he really has become is " history ".
>
>You forgot to add, Phil, that my mother was a hamster and my father
>smelt of eldeberries.

Even when he was young?
--
John

525. Re: nixie driver

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-22 18:09:29 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <y3JHl.25208$c45.24575@nlpi065.nbdc.sbc.com>
Source record: 2928

JIMMIE wrote:
> On Apr 21, 11:40 pm, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
>> On Apr 21, 6:07 pm, Joerg <notthisjoerg...@removethispacbell.net>
>> wrote:
>>
>>
>>
>>
>>
>>> Bruce W. Ellis wrote:
>>>> On Wed, 8 Apr 2009 06:51:53 -0700 (PDT), Tim Shoppa
>>>> <sho...@trailing-edge.com> wrote:
>>>>> On Apr 3, 10:34 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
>>>>>> I have a Systron Donner frequency counter that uses Nixie tubes. The
>>>>>> counter works fine but I am forever replacing the Nixie drivers
>>>>>> 74141s. I started to use it this AM an one was out. Is there a
>>>>>> replacement for the 74141, I couldnt find one, or is there a circuit I
>>>>>> could build on a DIP header to replace them. I could probably design
>>>>>> one but I wanted something tried an tested as I dont want to put my
>>>>>> counter board at more risk than I have to.
>>>>> Domestic 74141's are hard to find these days but on E-bay the Russian
>>>>> equivalent is very common.
>>>>> Yes, you could build just about anything with a one-of-ten decoder and
>>>>> some current-sink drivers to do the same.
>>>>> If the goal isn't nixie tubes but is a working frequency counter, you
>>>>> could probably put the counter up on E-bay for somebody who wants
>>>>> nixie tubes, and use the money to buy several superior frequency
>>>>> counters.
>>>>> Tim N3QE
>>>> Just remember to cut down on the voltage and current to the nixie
>>>> tubes and the 141s will last forever...
>>> One risk with such chips is that a nixie element occasionally reaches
>>> strike voltage while the respective driver output is off. Or doesn't
>>> extinguish right away when turned off. Then the dissipation in the 55V
>>> zeners inside might be too much to stomach for the little chip.
>>> According to the datasheet those things aren't really high voltage switches.
>>> --
>>> 73, Joerg- Hide quoted text -
>>> - Show quoted text -
>> The current limiting resistor going to the tubes is 39K. Im going to
>> increase that to 47K and see what happens. After putting in new chips
>> it may be months to a year before I see another problem with it. I
>> wish I knew what I was up against if I had a schematic, knew what the
>> voltages were supposed to be it would help greatly. I bought one a

>> surplus from where I work and from what I heard of its history it had
>> ths problem for along time. The second one I got ws at a hamfest and
>> it too seems to have the same problem. Could it be bad nixie tubes?
>>
>> Jimmie- Hide quoted text -
>>
>> - Show quoted text -
>
> nixies are a burroughs 57505s and some other not readable type.
> Ican make out the word "electronics" and the number "7341"
> Interestingly these are the ones I dont have a problem with. Maybe I
> have found my problem. Now to find a solution. Where can I find these
> nxies?
>

The Burroughs cause problems? And someone replaced a few with other types? Getting a certain brand and type nixie will be tough. Most nixies offered these days seem to be from Russian sources. There is also a guy in NL who specializes in nixie retro clocks, he might know more. If you really can't find any, there could be a somewhat scientific solution:

Pop one each out of there and hang them onto a voltage source, with series resistor. Crank it up from zero, see where it lights, then turn it down and see where it extinguishes. Try at a somewhat elevated temperature as well. Then you'd have to get the supply voltage inside the counter to the sweet spot where it's nearly guaranteed that the 74141 will never sit with an output high (meaning 55-60V) and the segment still lit. This could be done by dropping the ones with lower striking voltage with a zener plus small bleeder.

--
73, Joerg

526. Re: Headphone Impedance

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-22 18:13:46 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <A7JHl.130838$BR.72251@en-nntp-04.dc1.easynews.com>
Source record: 2929

"Bill M" <radioexray@geeemail.com> wrote in message
news:gsm2hi0rb1@news3.newsguy.com...
> Regular old-time "2k" phones ohm out pretty close to 2k in DC resistance
> and their impedance is in that same ballpark. They are all over the place
> nowadays . May be fine on a regen set but suck horribly on a crystal set.

Hmm... so a crystal radio would effectively perform better using a 1k<-->8 ohm audio transfer than just using the "traditional" crystal earphones?

Are crystal earphones called that because they're used with crystal radios, or because they really do have some sort of crystal in them (seems unlikely)?

---Joel

527. Re: Headphone Impedance

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-22 20:24:43 UTC
From: M0WYM <Sansspam@peartreegreen.org>
Message-ID: <gsnueb$v5l$1@news.albasani.net>
Source record: 2930

Joel Koltner wrote:

> Are crystal earphones called that because they're used with crystal radios, or
> because they really do have some sort of crystal in them (seems unlikely)?
>
> ---Joel
>
>

Not at all unlikely :-) Crystal earphones are piezoelectric devices
- the small electrical AF signal produces a small mechanical
movement. These devices have very high impedances so are ideal for
extremely low power circuits such as crystal sets.
See also crystal cartridges for playing records, these were some
what chunkier and would produce a lot of output and a typical cheap
record player might consist of a crystal cartridge (pickup) driving
the grid of a tridode / pentode arrangement (EL86 I think).

Charlie.

--
M0WYM
www.radiowymsey.org

Sign today!
http://petitions.pm.gov.uk/SaveShortwave/

528. Re: Headphone Impedance

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-22 22:35:24 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <7IadnaN19Lv_EHLUnZ2dnUVZ_judnZ2d@earthlink.com>
Source record: 2931

"Joel Koltner" <zapwireDASHgroups@yahoo.com> wrote in message
news:A7JHl.130838$BR.72251@en-nntp-04.dc1.easynews.com...
> Are crystal earphones called that because they're used with crystal
> radios, or because they really do have some sort of crystal in them (seems
> unlikely)?
>
> ---Joel
>
>

The crystal earphone is called that because it does contain a crystal,
similar to some microphones.

The crystal in a crystal radio is the diode that does the conversion from RF
to AF. It started off years ago as a real crystal. A semiconductive
mineral crystal, usually lead sulfide (galena) or cadmium sulfide.

529. Re: Headphone Impedance

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-23 01:13:56 UTC
From: Unca Pete <radioconnection@cox.net>
Message-ID: <okPHl.69646$GU6.42377@newsfe09.iad>
Source record: 2933

The impedance of the headphone is pretty much meaningless.
The sensitivity is critical. Impedance matching can be done with
high quality audio interstage transformers. The most popular
headsets are made from sound powered Deck-Talkers used on
WWII era military ships. They have balanced armatures and
are extremely sensitive, and very low impedance.

Pete K1ZJH

530. Re: Headphone Impedance

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-23 01:16:59 UTC
From: Unca Pete <radioconnection@cox.net>
Message-ID: <okPHl.69647$GU6.47674@newsfe09.iad>
Source record: 2932

Ben Tongue's website offers exellent engineering analysis
and practical information on crystal set design:

http://www.bentongue.com/xtalset/xtalset.html

For good practical discussions try TheRadioBoard.com.
Lot's of xtal set experimenters over there to answer
questions...

Pete k1zjh

531. Re: XTAL Radio Receiver Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-23 01:18:51 UTC
From: Unca Pete <radioconnection@cox.net>
Message-ID: <VmPHI.69696$GU6.51002@newsfe09.iad>
Source record: 2934

"raypsi" <RBorowiak@gmail.com> wrote in message
news:a28cb646-5ebd-4d82-92e8-1595a364fab8@y10g2000prc.googlegroups.com...
On Apr 21, 11:14 pm, Bill M <radioex...@geeemail.com> wrote:

>. Phones don't respond to watts.

> -Bill

Hey OM:

Thanks for the sardonic epiphany.

73 OM

For an education:

http://www.bentongue.com/xtalset/xtalset.html

de n8zu

532. Re: nixie driver

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-23 03:41:49 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <3ba43081-5845-4317-9b22-40a4a94c8d00@g19g2000yql.googlegroups.com>
Source record: 2935

On Apr 22, 2:09 pm, Joerg <notthisjoerg...@removethispacbell.net>
wrote:
> JIMMIE wrote:
> > On Apr 21, 11:40 pm, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> >> On Apr 21, 6:07 pm, Joerg <notthisjoerg...@removethispacbell.net>
> >> wrote:
>
> >>> Bruce W. Ellis wrote:
> >>>> On Wed, 8 Apr 2009 06:51:53 -0700 (PDT), Tim Shoppa
> >>>> <sho...@trailing-edge.com> wrote:
> >>>>> On Apr 3, 10:34 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> >>>>>> I have a Systron Donner frequency counter that uses Nixie tubes. The
> >>>>>> counter works fine but I am forever replacing the Nixie drivers
> >>>>>> 74141s. I started to use it this AM an one was out. Is there a
> >>>>>> replacement for the 74141, I couldnt find one, or is there a circuit I
> >>>>>> could build on a DIP header to replace them. I could probably design
> >>>>>> one but I wanted something tried an tested as I dont want to put my
> >>>>>> counter board at more risk than I have to.
> >>>>> Domestic 74141's are hard to find these days but on E-bay the Russian
> >>>>> equivalent is very common.
> >>>>> Yes, you could build just about anything with a one-of-ten decoder and
> >>>>> some current-sink drivers to do the same.
> >>>>> If the goal isn't nixie tubes but is a working frequency counter, you
> >>>>> could probably put the counter up on E-bay for somebody who wants
> >>>>> nixie tubes, and use the money to buy several superior frequency
> >>>>> counters.
> >>>>> Tim N3QE
> >>>> Just remember to cut down on the voltage and current to the nixie
> >>>> tubes and the 141s will last forever...
> >>> One risk with such chips is that a nixie element occasionally reaches
> >>> strike voltage while the respective driver output is off. Or doesn't
> >>> extinguish right away when turned off. Then the dissipation in the 55V
> >>> zeners inside might be too much to stomach for the little chip.
> >>> According to the datasheet those things aren't really high voltage switches.
> >>> --
> >>> 73, Joerg- Hide quoted text -
> >>> - Show quoted text -
> >> The current limiting resistor going to the tubes is 39K. Im going to
> >> increase that to 47K and see what happens. After putting in new chips
> >> it may be months to a year before I see another problem with it. I
> >> wish I knew what I was up against if I had a schematic, knew what the
> >> voltages were supposed to be it would help greatly. I bought one a
> >> surplus from where I work and from what I heard of its history it had
> >> ths problem for along time. The second one I got ws at a hamfest and

> >> it too seems to have the same problem. Could it be bad nixie tubes?
>
> >> Jimmie- Hide quoted text -
>
> >> - Show quoted text -
>
> > nixies are a burroughs 57505s and some other not readable type.
> > Ican make out the word "electronics" and the number "7341"
> > Interestingly these are the ones I dont have a problem with. Maybe I
> > have found my problem. Now to find a solution. Where can I find these
> > nxies?
>
> The Burroughs cause problems? And someone replaced a few with other
> types? Getting a certain brand and type nixie will be tough. Most nixies
> offered these days seem to be from Russian sources. There is also a guy
> in NL who specializes in nixie retro clocks, he might know more. If you
> really can't find any, there could be a somewhat scientific solution:
>
> Pop one each out of there and hang them onto a voltage source, with
> series resistor. Crank it up from zero, see where it lights, then turn
> it down and see where it extinguishes. Try at a somewhat elevated
> temperature as well. Then you'd have to get the supply voltage inside
> the counter to the sweet spot where it's nearly guaranteed that the
> 74141 will never sit with an output high (meaning 55-60V) and the
> segment still lit. This could be done by dropping the ones with lower
> striking voltage with a zener plus small bleeder.
>
> --
> 73, Joerg- Hide quoted text -
>
> - Show quoted text -

Thanks Joerg

Im not sure if the 210 volts is the design voltage or if something is
wrong with the power supply. I added a zener to get it down to 180. At
180 I think the characters are a little less hazy looking and only
slightly dimmer. I guess I will just have to see how it goes.for now
and keep my eye out for a maintenance manual.

Jimmie

533. Re: XTAL Radio Receiver Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-23 03:45:47 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <d6c7702a-5b2d-4eeb-9e71-f85635f2dcb1@x29g2000prf.googlegroups.com>
Source record: 2936

On Apr 22, 9:18 pm, "Unca Pete" <radioconnect...@cox.net> wrote:

>
> For an education:
>
> http://www.bentongue.com/xtalset/xtalset.html

Hey OM:

That's a nice link. But nowhere could I find a diode double, tripler,
or quadrupler detector.

73 OM

de n8zu

534. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-23 04:29:59 UTC
From: Sylvia Else <sylvia@not.at.this.address>
Message-ID: <002839ba$0$19747$c3e8da3@news.astraweb.com>
Source record: 2937
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Tim Shoppa wrote:
> A terminology question I suppose about the derivation of the term
> "Superheterodyne" more than anything else:
>
> Does the "Super" actually mean anything? Is there a Subheterodyne?
>
> Traditionally superhets mix a higher radio frequency down to a lower
> IF frequency, but certainly in the past few decades radios with IF's
> above the RF frequency have become very common in broadband
> applications, and those are still called superhets, not subhets :-).

If it comes to that, old Longwave/Mediumwave superhet receivers
generated an IF for the LW band that was higher than the frequency of
the incoming signal. The IF was usually a frequency between the two bands.

Sylvia.

535. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-23 15:27:37 UTC
From: Phil Hobbs <pcdhSpamMeSenseless@electrooptical.net>
Message-ID: <ZcudnVO8laZ3FW3UnZ2dnUVZ_o2dnZ2d@supernews.com>
Source record: 2938
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

John Larkin wrote:
> On Mon, 20 Apr 2009 09:50:05 -0700 (PDT), Tim Shoppa
> <shoppa@trailing-edge.com> wrote:
>
>> A terminology question I suppose about the derivation of the term
>> "Superheterodyne" more than anything else:
>>
>> Does the "Super" actually mean anything? Is there a Subheterodyne?
>>
>> Traditionally superhets mix a higher radio frequency down to a lower
>> IF frequency, but certainly in the past few decades radios with IF's
>> above the RF frequency have become very common in broadband
>> applications, and those are still called superhets, not subhets :-).
>>
>> Google turns up a couple hits on subheterodyne but other than one that
>> might mean "IF higher in frequency than RF" I don't recognize what
>> they mean..
>>
>> I suspect that "Super" was more a marketing term than anything
>> else :-).
>>
>> Tim N3QE
>
> Supersonic.
>
> http://en.wikipedia.org/wiki/Superheterodyne_receiver
>
>
> John
>

Not a bad article, except that he seems to think that cascading multiple
stages at a single IF improves image rejection, and that very high IFs
are much less common than double conversion. (Does *anyone* use double
conversion anymore? Spur city.)

--
Dr Philip C D Hobbs
Principal
ElectroOptical Innovations
55 Orchard Rd
Briarcliff Manor NY 10510
845-480-2058
hobbs at electrooptical dot net

http://electrooptical.net

536. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-23 15:41:46 UTC
From: John Larkin <jjlarkin@highNOTlandTHIStechnologyPART.com>
Message-ID: <tr21v4tb3sgbqjc38r1hcouaj657358hl9@4ax.com>
Source record: 2939
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Thu, 23 Apr 2009 11:27:37 -0400, Phil Hobbs
<pcdhSpamMeSenseless@electrooptical.net> wrote:

>John Larkin wrote:
>> On Mon, 20 Apr 2009 09:50:05 -0700 (PDT), Tim Shoppa
>> <shoppa@trailing-edge.com> wrote:
>>
>>> A terminology question I suppose about the derivation of the term
>>> "Superheterodyne" more than anything else:
>>>
>>> Does the "Super" actually mean anything? Is there a Subheterodyne?
>>>
>>> Traditionally superhets mix a higher radio frequency down to a lower
>>> IF frequency, but certainly in the past few decades radios with IF's
>>> above the RF frequency have become very common in broadband
>>> applications, and those are still called superhets, not subhets :-).
>>>
>>> Google turns up a couple hits on subheterodyne but other than one that
>>> might mean "IF higher in frequency than RF" I don't recognize what
>>> they mean..
>>>
>>> I suspect that "Super" was more a marketing term than anything
>>> else :-).
>>>
>>> Tim N3QE
>>
>> Supersonic.
>>
>> http://en.wikipedia.org/wiki/Superheterodyne_receiver
>>
>>
>> John
>>
>
>Not a bad article, except that he seems to think that cascading multiple
>stages at a single IF improves image rejection, and that very high IFs
>are much less common than double conversion. (Does *anyone* use double
>conversion anymore? Spur city.)

I did a double-conversion superhet FSK receiver for Reuters, umm,
maybe 20 years ago. I used state-of-the-art MF10 filter chips. Just
after I did it, they dumped all their wireline FSK newsfeeeds for the
Internet. Pity, it was a neat design.

We may do it again soon, for a scientific instrument, more digital this time.

John

537. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-23 16:55:27 UTC
From: John Nagle <nagle@animats.com>
Message-ID: <49f094eb$0$1595$742ec2ed@news.sonic.net>
Source record: 2940
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Tim Shoppa wrote:
> A terminology question I suppose about the derivation of the term
> "Superheterodyne" more than anything else:
>
> Does the "Super" actually mean anything? Is there a Subheterodyne?
>
> Traditionally superhets mix a higher radio frequency down to a lower
> IF frequency, but certainly in the past few decades radios with IF's
> above the RF frequency have become very common in broadband
> applications, and those are still called superhets, not subhets :-).

The IF frequency is above the signal frequency, hence the "super"
prefix.

There are also "homodyne" receivers, where the local oscillator is
at the same frequency as the received carrier. These convert the input signal
all the way down to the output signal in one step. This was an
early idea, but until phase locked loops were figured out, hard to make work.
It's used today in some microwave and optical systems.

John Nagle

538. Re: XTAL Radio Receiver Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-23 21:20:20 UTC
From: Unca Pete <radioconnection@cox.net>
Message-ID: <yY4Il.82101$TD1.68906@newsfe18.iad>
Source record: 2941

"raypsi" <RBorowiak@gmail.com> wrote in message
news:d6c7702a-5b2d-4eeb-9e71-f85635f2dcb1@x29g2000prf.googlegroups.com...
On Apr 22, 9:18 pm, "Unca Pete" <radioconnect...@cox.net> wrote:

>
> For an education:
>
> http://www.bentongue.com/xtalset/xtalset.html

Hey OM:

That's a nice link. But nowhere could I find a diode double, tripler,
or quadrupler detector.

73 OM

Probably because they don't deliver any benefits?

de n8zu

539. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-23 21:22:35 UTC
From: Unca Pete <radioconnection@cox.net>
Message-ID: <F_4Il.82107$TD1.3658@newsfe18.iad>
Source record: 2942
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Subheterodyne?? BFO???

540. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-23 22:09:42 UTC
From: kevin93 <kevin@whitedigs.com>
Message-ID: <9af3d8cc-8501-41fa-aa06-165b0766bd6b@z16g2000prd.googlegroups.com>
Source record: 2943
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Apr 20, 9:50 am, Tim Shoppa <sho...@trailing-edge.com> wrote:
> A terminology question I suppose about the derivation of the term
> "Superheterodyne" more than anything else:
>
> Does the "Super" actually mean anything? Is there a Subheterodyne?
>
> Traditionally superhets mix a higher radio frequency down to a lower
> IF frequency, but certainly in the past few decades radios with IF's
> above the RF frequency have become very common in broadband
> applications, and those are still called superhets, not subhets :-).
>
> Google turns up a couple hits on subheterodyne but other than one that
> might mean "IF higher in frequency than RF" I don't recognize what
> they mean..
>
> I suspect that "Super" was more a marketing term than anything
> else :-).
>
> Tim N3QE

I thought it was a contraction of "supersonic heterodyne".

At that time receivers were TRF and in many cases used reaction (i.e.
controlled positive feedback) to improve selectivity and gain. This
could be exploited to receive CW signals by advancing to the point of
feedback resulting in an audible heterodyne (whistle) at the output
whwn tuned close to a signal.

The supersonic heterodyne performed in a similar way but was
intentionally above audible range (i.e. supersonic) for amplification
at the intermediate frequency.

kevin

541. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-23 23:04:55 UTC
From: Eeyore <rabbitsfriendsandrelations@hotmail.com>
Message-ID: <49F0F417.DDA0C0D0@hotmail.com>
Source record: 2944
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Bert Hyman wrote:

> Tim Shoppa <shoppa@trailing-edge.com> wrote:
>
> > A terminology question I suppose about the derivation of the term
> > "Superheterodyne" more than anything else:
> >
> > Does the "Super" actually mean anything?
>
> My recollection is that Armstrong used the term "supersonic heterodyne"
> to note the fact that the beat frequency between the signal and LO
> was "supersonic."

Ultrasonic of course, so it's been the wrong name all along.

Graham

542. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-23 23:08:53 UTC
From: Eeyore <rabbitsfriendsandrelations@hotmail.com>
Message-ID: <49F0F505.50ABB8B7@hotmail.com>
Source record: 2945
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Tim Shoppa wrote:

> John Larkin <jjSNIPlar...@highTHISlandtechnology.com> wrote:
> > Tim Shoppa <sho...@trailing-edge.com> wrote:
> > >A terminology question I suppose about the derivation of the term
> > >"Superheterodyne" more than anything else:
> >
> > >Does the "Super" actually mean anything? Is there a Subheterodyne?
> >
> > >Traditionally superhets mix a higher radio frequency down to a lower
> > >IF frequency, but certainly in the past few decades radios with IF's
> > >above the RF frequency have become very common in broadband
> > >applications, and those are still called superhets, not subhets :-).
> >
> > >Google turns up a couple hits on subheterodyne but other than one that
> > >might mean "IF higher in frequency than RF" I don't recognize what
> > >they mean..
> >
> > >I suspect that "Super" was more a marketing term than anything
> > >else :-).
> >
> > >Tim N3QE
> >
> > Supersonic.
> >
> > http://en.wikipedia.org/wiki/Superheterodyne_receiver
>
> I saw that in Wikipedia too. I didn't believe it, it doesn't make
> sense. Why not just call all radio frequencies and IF frequencies
> above 20kHz "supersonic"? Then all radios (*) are supersonic, and
> we're back to super meaning nothing at all.

Supersonic today means travelling faster than the speed of sound. The correct word now would be ultrasonic.

So maybe they should be recalled ultraheterodyne receivers.

Graham

543. Re: Headphone Impedance

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-24 00:12:10 UTC
From: Bill M <radioexray@geeemail.com>
Message-ID: <gsr04t024hl@news3.newsguy.com>
Source record: 2946

Unca Pete wrote:
> Ben Tongue's website offers exellent engineering analysis
> and practical information on crystal set design:
>
> http://www.bentongue.com/xtalset/xtalset.html
>
> For good practical discussions try TheRadioBoard.com.
> Lot's of xtal set experimenters over there to answer
> questions...
>
> Pete k1zjh
>
>
>
Was gonna recommend the same. Along the lines of good 'crystal radio'
headphones some of the guys have found some of the little piezo devices
make for a very sensitive, high-impedance DIY headfone project. I think
one of the guys is selling them as a kit, with shooter's muffs included.
Haven't tried them myself but the reports are very favorable.

-Bill

544. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-24 00:16:19 UTC
From: Phil Allison <philallison@tpg.com.au>
Message-ID: <75cemgF17ntdsU1@mid.individual.net>
Source record: 2947
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"Eeysore the Fuckwit "
> Tim Shoppa the ASD fucked Shithead "
>>
>> > A terminology question I suppose about the derivation of the term
>> > "Superheterodyne" more than anything else:
>> >
>> > Does the "Super" actually mean anything?
>>
>> My recollection is that Armstrong used the term "supersonic heterodyne"
>> to note the fact that the beat frequency between the signal and LO
>> was "supersonic."
>
> Ultrasonic of course,

** There is no "of course" about it".

> so it's been the wrong name all along.

** Pedantic, insane bollocks.

..... Phil

545. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-24 00:19:25 UTC
From: Phil Allison <philallison@tpg.com.au>
Message-ID: <75cesbF170aesU1@mid.individual.net>
Source record: 2948
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"Eeysore the Fucking LIAR "

> Supersonic today means travelling faster than the speed of sound.

** Not when the context is frequency - you fucking MORON.

http://en.wiktionary.org/wiki/supersonic

..... Phil

546. Re: XTAL Radio Receiver Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-24 00:21:46 UTC
From: Bill M <radioexray@geeemail.com>
Message-ID: <gsr0mu02502@news3.newsguy.com>
Source record: 2949

Unca Pete wrote:
> "raypsi" <RBorowiak@gmail.com> wrote in message
> news:d6c7702a-5b2d-4eeb-9e71-f85635f2dcb1@x29g2000prf.googlegroups.com...
> On Apr 22, 9:18 pm, "Unca Pete" <radioconnect...@cox.net> wrote:
>
>> For an education:
>>
>> http://www.bentongue.com/xtalset/xtalset.html
>
> Hey OM:
>
> That's a nice link. But nowhere could I find a diode double, tripler,
> or quadrupler detector.
>
> 73 OM
>
> Probably because they don't deliver any benefits?

Basically true but in fairness to the folks who have never tried it you
MAY get some additional volume on a reasonably strong local station.
You shoot your selectivity and ultimate sensitivity in the foot, though,
because of the extra loading on the tank. ie, not a DX set.

There's one circuit floating around that uses a dual center-tapped tank
(so to speak) with a diode on each side and their outputs are combined.
One fellow said it worked pretty well as a workaround for the
loading concern. Still not a DXers set but better than attempting a
voltage doubling detector.

-Bill

547. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-24 00:25:21 UTC
From: Phil Allison <philallison@tpg.com.au>
Message-ID: <75cf7eF1807ubU1@mid.individual.net>
Source record: 2950
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"John Nagle the Flatulent Fool"

> The IF frequency is above the signal frequency, hence the "super"
> prefix.

** Nagle just did another smelly fart.

Peeeeeeuuueeee

.... Phil

548. Re: XTAL Radio Receiver Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-24 00:45:13 UTC
From: Unca Pete <radioconnection@cox.net>
Message-ID: <DY7Il.50051$Qh6.18452@newsfe14.iad>
Source record: 2851

"Bill M" <radioexray@geeemail.com> wrote in message > Basically true but in fairness to the folks who have never tried it you
> MAY get some additional volume on a reasonably strong local station. You
> shoot your selectivity and ultimate sensitivity in the foot, though,
> because of the extra loading on the tank. ie, not a DX set.
>
> There's one circuit floating around that uses a dual center-tapped tank
> (so to speak) with a diode on each side and their outputs are combined.
> One fellow said it worked pretty well as a workaround for the loading
> concern. Still not a DXers set but better than attempting a voltage
> doubling detector.
>
> -Bill

Basically a fullwave rectifier?

I'd still opt for a quality matching transformer, and go for the max. volume if that is the goal.

Pete

549. Re: Headphone Impedance

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-24 00:51:10 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <428Il.13958$nC7.4099@en-nntp-01.dc1.easynews.com>
Source record: 2852

Thanks guys, I appreciate the history lesson and the links!

550. Source for high-Q HF inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-24 01:01:17 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <Bb8Il.215669$UQ6.79164@en-nntp-03.dc1.easynews.com>
Source record: 2853

Are there some vendors of readily available (stock) inductors that have reasonably good Q's (>100) throughout the HF band?

I'm familiar with something like the Coilcraft "maxi springs" (http://coilcraft.com/maxi.cfm), and while they hit Q's of 100 by 30MHz, I'd really like something that's already there by 3MHz or less (...and still have a self-resonant frequency of >30MHz). This seems quite doable simply by making a larger coil with thicker wire, I'd just like to find a place that offers such inductors off-the-shelf rather than having to wind my own. Inductance in the ballpark of 1-10uH would be good, although it's not critical.

The goal here is to try out making some adjustable notch filters for a receiver (by switching L's and C's in and out, like antenna tuners do). Hence, high Q is important, but power handling capability isn't so much, and anything smaller than a breadbox is fine size-wise.

Thanks,
---Joel

551. Re: XTAL Radio Receiver Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-24 02:26:29 UTC
From: Bill M <radioexray@geeemail.com>
Message-ID: <gsr80p02kcb@news4.newsguy.com>
Source record: 2854

Unca Pete wrote:
> "Bill M" <radioexray@geeemail.com> wrote in message > Basically true but in
> fairness to the folks who have never tried it you
>> MAY get some additional volume on a reasonably strong local station. You
>> shoot your selectivity and ultimate sensitivity in the foot, though,
>> because of the extra loading on the tank. ie, not a DX set.
>>
>> There's one circuit floating around that uses a dual center-tapped tank
>> (so to speak) with a diode on each side and their outputs are combined.
>> One fellow said it worked pretty well as a workaround for the loading
>> concern. Still not a DXers set but better than attempting a voltage
>> doubling detector.
>>
>> -Bill
>
> Basically a fullwave rectifier?
>
> I'd still opt for a quality matching transformer, and go for the max.
> volume if that is the goal.
>
> Pete
>
>
Yabbut...max volume isn't the same as max sensitivity in DX sets. Its
only one part of the scheme. I used the term "house of mirrors" in all
seriousness. You upgrade the xfmr to a certain point then you need a
diode that performs to that level and then you need to upgrade the tank
to that level...and so it goes. Thats why high performance crystal
radios are so fascinating. And they really are. I've logged Brasilians
at 3500 miles away.

The guys who are top-scoring in the annual 'test' are logging 100-200
stations. You get there with selectivity and sensitivity...and patience
with good ears. No doubling, tripling, quadrupling circuits are in the
mix. They don't pan out. Its all well documented.

-Bill

552. Re: Source for high-Q HF inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-24 04:29:42 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <7924a886-adee-484e-8828-046f46e3fa9b@f41g2000pra.googlegroups.com>
Source record: 2855

On Apr 23, 6:01 pm, "Joel Koltner" <zapwireDASHgro...@yahoo.com>
wrote:
> Are there some vendors of readily available (stock) inductors that have
> reasonably good Q's (>100) throughout the HF band?
>
> I'm familiar with something like the Coilcraft "maxi springs"
> (http://coilcraft.com/maxi.cfm), and while they hit Q's of 100 by 30MHz, I'd
> really like something that's already there by 3MHz or less (...and still have
> a self-resonant frequency of >30MHz). This seems quite doable simply by
> making a larger coil with thicker wire, I'd just like to find a place that
> offers such inductors off-the-shelf rather than having to wind my own.
> Inductance in the ballpark of 1-10uH would be good, although it's not
> critical.
>
> The goal here is to try out making some adjustable notch filters for a
> receiver (by switching L's and C's in and out, like antenna tuners do).
> Hence, high Q is important, but power handling capability isn't so much, and
> anything smaller than a breadbox is fine size-wise.
>
> Thanks,
> ---Joel

You'll be limited by physics, Joel...I know you know that, but I think
it's worth putting bounds on things. If you're willing to use a coil
on a powdered iron core, you should be able to get the sort of Qu
you're asking for in a fairly compact coil. If you want to order
production quantities, you can easily find vendors willing to wind
specific coils for you, but if you want just one or a few, you may
have more difficulty. I've had situations where I wanted to avoid the
distortion of a powdered iron core, and used some "air core" coils
(actually phenolic, I think) from API Delevan and equivalent ones from
Gowanda. They were "stock" values, but I learned that they commonly
build them when they get an order, but try to have a few around they
can ship as samples. But again, they aren't as high Q as you want at
the lower HF frequencies.

For an air-core coil at HF, you can estimate the size required for a
given Qu pretty accurately as Qu = 100 * D(inches) * sqrt(f(MHz)).
That's about right for a coil the same length as its diameter.
There's a chart in the Sams/ITT Reference Data for Engineers book that
gives essentially a correction for the length, if it's shorter or
longer than that. At lower frequencies (AM broadcast band, and up to
a very few MHz) you can do a bit better with the appropriate Litz
wire. Anyway, for example at 4MHz, expect to need an air-core coil
about 1/2 inch diameter to get Qu around 100.

It used to be that you could buy a supply of AirDux or equivalent coil stock, and just cut off the number of turns you needed for some specific inductance. My answer to that these days is to thread some plastic tube on a lathe, and have a few different thread pitches around, then just wind magnet wire down in the groove to get what I need "on demand." It's easy to do the winding and makes a nice, uniform-looking coil. I've used that technique to make sets of coils for reasonably sharp cutoff bandpass, lowpass and highpass filters with very low distortion that I've used to characterize the distortion performance of amplifiers and the like.

Sorry that I don't have a better source of ready-made coils...maybe someone else has.

Cheers,
Tom

553. Re: XTAL Radio Receiver Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-24 13:05:39 UTC
From: David <DavidBR549@gmail.com>
Message-ID: <6a26629a-3cea-4890-9fe9-a58d0b6592c0@t21g2000yqi.googlegroups.com>
Source record: 2856

On Apr 20, 1:34 pm, David <DavidBR...@gmail.com> wrote:
> Looking for Crystal Radio Receiver Circuits, that have a voltage
> quadrupler to increase headphone volume without batteries or AC power.

On my original post i was, and still looking for a quadrupler circuit,
not information on why it does not work.

554. Re: Source for high-Q HF inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-24 13:37:10 UTC
From: John KD5YI <groups2_dot_jocjo@xoxy.net>
Message-ID: <agjII.2609$b11.1481@nwrddc02.gnilink.net>
Source record: 2857

"K7ITM" <k7itm@msn.com> wrote in message
news:7924a886-adee-484e-8828-046f46e3fa9b@f41g2000pra.googlegroups.com...
On Apr 23, 6:01 pm, "Joel Koltner" <zapwireDASHgro...@yahoo.com>
wrote:
> Are there some vendors of readily available (stock) inductors that have
> reasonably good Q's (>100) throughout the HF band?
>
> I'm familiar with something like the Coilcraft "maxi springs"
> (http://coilcraft.com/maxi.cfm), and while they hit Q's of 100 by 30MHz,
> I'd
> really like something that's already there by 3MHz or less (...and still
> have
> a self-resonant frequency of >30MHz). This seems quite doable simply by
> making a larger coil with thicker wire, I'd just like to find a place that
> offers such inductors off-the-shelf rather than having to wind my own.
> Inductance in the ballpark of 1-10uH would be good, although it's not
> critical.
>
> The goal here is to try out making some adjustable notch filters for a
> receiver (by switching L's and C's in and out, like antenna tuners do).
> Hence, high Q is important, but power handling capability isn't so much,
> and
> anything smaller than a breadbox is fine size-wise.
>
> Thanks,
> ---Joel

(snip some of Tom's good stuff)

"It used to be that you could buy a supply of AirDux or equivalent coil
stock, and just cut off the number of turns you needed for some
specific inductance. My answer to that these days is to thread some
plastic tube on a lathe, and have a few different thread pitches
around, then just wind magnet wire down in the groove to get what I
need "on demand." It's easy to do the winding and makes a nice,
uniform-looking coil. I've used that technique to make sets of coils
for reasonably sharp cutoff bandpass, lowpass and highpass filters
with very low distortion that I've used to characterize the distortion
performance of amplifiers and the like."

"Sorry that I don't have a better source of ready-made coils...maybe
someone else has."

Cheers,
Tom

Apparently, AirDux is still available:

http://www.airdux.com/

73,
John

555. Re: Source for high-Q HF inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-24 14:57:26 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <93c0014d-1694-47ae-afec-348946a09ded@v4g2000vba.googlegroups.com>
Source record: 2858

On Apr 23, 9:01 pm, "Joel Koltner" <zapwireDASHgro...@yahoo.com>
wrote:
> Are there some vendors of readily available (stock) inductors that have
> reasonably good Q's (>100) throughout the HF band?
>
> I'm familiar with something like the Coilcraft "maxi springs"
> (http://coilcraft.com/maxi.cfm), and while they hit Q's of 100 by 30MHz, I'd
> really like something that's already there by 3MHz or less (...and still have
> a self-resonant frequency of >30MHz). This seems quite doable simply by
> making a larger coil with thicker wire, I'd just like to find a place that
> offers such inductors off-the-shelf rather than having to wind my own.
> Inductance in the ballpark of 1-10uH would be good, although it's not
> critical.
>
> The goal here is to try out making some adjustable notch filters for a
> receiver (by switching L's and C's in and out, like antenna tuners do).
> Hence, high Q is important, but power handling capability isn't so much, and
> anything smaller than a breadbox is fine size-wise.

I usually design my filters to work reasonably well with lowish Q inductors, say 100, so that I don't have to ever worry about the actual Q. My rough measurements is that a Q of 100 is reasonably reached using ferrite toroids not too far off from their optimal frequencies etc. But some have done very good measurements of many different coil types in search of extremely high Q inductors, the best writeup I know is at:

http://w7zoi.net/coilq.pdf

His conclusion was that Q's of 300's over an octave or two on ferrite cores are very practical.

Other experiments and measurements he does go through Litz wire, Litz rope, spider coils, etc. achieving some spectacularly high Q's.

I don't think any of this helps your "off the shelf" requirement, but ferrite cores work well within their frequency range.

Tim N3QE

556. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-24 16:38:12 UTC
From: "aj-smith@blueyonder.co.uk" <aj-smith@blueyonder.co.uk>
Message-ID: <53e718dd-5ce7-4795-b716-ac16d6f483b8@g19g2000vbi.googlegroups.com>
Source record: 2859
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Apr 20, 5:50 pm, Tim Shoppa <sho...@trailing-edge.com> wrote:
> A terminology question I suppose about the derivation of the term
> "Superheterodyne" more than anything else:
>
> Does the "Super" actually mean anything? Is there a Subheterodyne?
>
> Traditionally superhets mix a higher radio frequency down to a lower
> IF frequency, but certainly in the past few decades radios with IF's
> above the RF frequency have become very common in broadband
> applications, and those are still called superhets, not subhets :-).
>
> Google turns up a couple hits on subheterodyne but other than one that
> might mean "IF higher in frequency than RF" I don't recognize what
> they mean..
>
> I suspect that "Super" was more a marketing term than anything
> else :-).
>
> Tim N3QE

I think that the way to answer a question like this is to try to find written material which originated as close as possible in time to the introduction of the term in question. Wikki entries should give references to original material, but of course those are not always easy for everyone to find, and to study.

The best that I can do in the way of original references with the books on my shelves is to quote from the 'Admiralty Handbook of Wireless Telegraphy 1931', HMSO, London, 1932. On page 721 is written - '... This use of amplification at a frequency intermediate between that of the incoming signal and an audible frequency gives this circuit its name of super-heterodyne, or supersonic heterodyne receiver'.

The discussion goes on to describe an Admiralty receiver having an IF frequency of 30kHz, which is just what you would expect a supersonic frequency to be. To my mind this settles the question. Andy G4OEP

557. Re: XTAL Radio Receiver Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-24 16:59:08 UTC
From: "aj-smith@blueyonder.co.uk" <aj-smith@blueyonder.co.uk>
Message-ID: <d550659d-dabf-47cc-92b3-ba0a4a39a257@n4g2000vba.googlegroups.com>
Source record: 2860

On Apr 20, 7:34 pm, David <DavidBR...@gmail.com> wrote:
> Looking for Crystal Radio Receiver Circuits, that have a voltage
> quadrupler to increase headphone volume without batteries or AC power.

Hi David - I think this idea will not work well for the reasons others have already given - (a) the forward voltage drop of the diodes (2 instead of 1) which means that you must have an rf signal of around 1.2v instead of just 0.6v before you hear anything at all, and (b) the question of the availability of power. A quadrupler will not increase the very small amount of power picked up by the aerial.

However, all is not lost. Other enthusiasts have been at work with a crystal set which uses a 'zero gate-threshold' FET as a form of passive synchrodyne detector. The incoming signal opens and closes the conducting channel of the fet at the same frequency as the signal applied to the earphones through the channel (they are both the same signal). This give synchronous mixing and hence detection of the rf envelope. The advantage is that the fet has low and high impedances in the right places (low channel impedance, high gate impedance) and so is highly efficient.

Forgive the long posting, but here is something copied from the GQRP Yahoo group, with references. Andy G4OEP

Hi to everyone on the list,

For those who have been following the "High sensitivity Crystal Set" and "More ham xtal set DX heard tonight on 80m" threads on this list I should like to share my recent experiences/observations using the ALD110900A device as a synchronous detector/crystal receiver.

The high sensitivity crystal set was featured again in the current Rad-Com (June 2007 edition, page 60) and the RSGB have made available a limited number of the ALD110900A devices on a first-come-first-served basis via RSGB sales. I obtained a small number of the ALD110900A devices so I could compare the performance to the 2N3819 jfet which I had been using in my version of the receiver based on the design by David Cripe (NE4AM) in his article "Nostagia For The Future" (Amateur Radio Today, Dec. 1995 pages 14-16) a copy of which can be found on this web page...

http://members.wideband.net.au/gzimmer/XtalSets/Detectors/FET1.html

The article referenced above was the inspiration for the more recent article in the January edition of QST, a copy of the QST article appears here...

www.arrl.org/qst/2007/01/culter.pdf

Observations/Comments:
I found the best results are obtained using the design described by David Cripes (NE4AM) in his 1995 article. His use of two tapped tuned circuits (band pass filter arangement) permits precise matching of both the antenna and the load, both of which are vital for best crystal set performance. In operation I found the receiver to perform very well with resuls comparable to a BC receiver, seperation of stations was readily achieved with good volume and loud enough for this "deaf old coot" to be able to listen to news broadcasts etc and understand what was being said. The antenna used is about 60 feet of wire and a central heating system counterpoise. My receiver shares the two 4 inch diameter coils used in the NE4AM design, it also shares the jfet (2N3819) with gate bias as described by David in his article.

The June Rad-Com article does not seem to place enough emphasis on the importance of matching the ALD110900A sorce/drain impedance and load (headphones) to the tuned circuit. My opinion is that best results are obtained with a good selection of tappings on the coil as described by NE4AM. The ALD110900A (or jfet plus negative gate bias supply) circuit demonstrates its superior performance over the OA81, OA91 etc style detector circuits when detecting weaker signals. Signals which are simply inaudible to the OAxx style detectors are rendered audible by the ALD or jfet synchronous detector design. The ALD or jfet design definately offer better performane for "crystal set DX for 80 Mtrs" or other similar applications.

I note that in both the January QST and June Rad-Com articles they used a low impedance telephone earpiece via an autotransformer for matching. In the Rad-Com article they said that "an old pair of Hi-Z headphones" was substituted for the low-Z earphone/autotransformer with no noticable improvement. I can only conclude that the "old pair of Hi-Z headphones" must have been very poor quality or had weak magnets, in my tests substituting my pair of "old Hi-Z headphones" into the circuit made a very significant difference. I tested several low-Z telephone earpieces (all worked) but the Hi-Z phones (4000 Ohms) consistently outperformed the low-Z units. Its also worth pointing out that the difference was most notable on weaker signals. On strong (local) signals the difference was much less obvious. I currently do not have a crystal earphone to test with but I suspect a crystal earphone would also outperform most low-Z earphones/matching transformer configurations.

And finally:
I would strongly advse anyone who is thinking about experimenting with this form of synchronous detector to first read David Cripes (NE4AM) article as a starting point and also give serious consideration to using a 2N3819 jfet plus adjustable negative gate bias supply in preference to the ALD110900A device. The only significant advantage I can see with the ALD device is that its zero Volts gate threshold avoids the requirement for the seperate negative gate bias supply

required by the jfet arangement and thus saves a few components.

The RSGB are currently offering the ALD110900A devices for 4 UK pounds each (including UK postage) but if you already have a 2N3819 (or similar N-ch' jfet) in the junk box then try that first with an adjustable negative gate supply and evaluate the circuit for yourself before spending your 4 pounds. One additional advantage of the jfet plus negative gate bias approach I have found is that by making the bias adjustable (front panel control) you can improve performance/sound quality on strong signals. The bias point for best sensitivity and lowest distortion (on stronger signals) are not the same so the ability to make bias adjustments "on-the-fly" is an advantage.

Conclusion:
If you are building a crystal set for the "local" station(s) then I see no real advantage in bothering with the syncronous detector approach but if you want a crystal set with highest possible performance then the syncronous detector plus tapped coils (for matching) gives outstanding performance.

I wonder, has anyone else on this list experimented with the ALD devices and if so what are your experiences?

73,s to all on the list.

Des (M0AYF G-QRP 9788)

558. Re: XTAL Radio Receiver Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-24 17:02:40 UTC
From: "pdrahn@coinet.com" <co_farmer@yahoo.com>
Message-ID: <128b1050-0546-44f8-80ba-5c879f359257@d38g2000prn.googlegroups.com>
Source record: 2861

On Apr 23, 5:21 pm, Bill M <radioex...@geeemail.com> wrote:
> Unca Pete wrote:
> > "raypsi" <RBorow...@gmail.com> wrote in message
> >news:d6c7702a-5b2d-4eeb-9e71-f85635f2dcb1@x29g2000prf.googlegroups.com...
> > > On Apr 22, 9:18 pm, "Unca Pete" <radioconnect...@cox.net> wrote:
>
> >> For an education:
>
> >>http://www.bentongue.com/xtalset/xtalset.html
>
> > > Hey OM:
>
> > > That's a nice link. But nowhere could I find a diode double, tripler,
> > > or quadrupler detector.
>
> > > 73 OM
>
> > > Probably because they don't deliver any benefits?
>
> Basically true but in fairness to the folks who have never tried it you
> MAY get some additional volume on a reasonably strong local station.
> You shoot your selectivity and ultimate sensitivity in the foot, though,
> because of the extra loading on the tank. ie, not a DX set.
>
> There's one circuit floating around that uses a dual center-tapped tank
> (so to speak) with a diode on each side and their outputs are combined.
>   One fellow said it worked pretty well as a workaround for the
> loading concern.   Still not a DXers set but better than attempting a
> voltage doubling detector.
>
> -Bill

Bill.
I built one of those several years ago. Plans came from a CQ magazine
article some years before. I couldn't get it to work very well back
then. couldn't get both circuits to tune to the same frequency, even
though it was built symetrically. A week ago, I brought it into the
shack from the shop and tried it again, using my 160 meter lazy quad
antenna. Still couldn't figure any way to get both sides to tune and
track together.

Looks nice and someone may have gotten it to work, but for now, it's
going back to the top shelf in the shop.

Paul, KD7HB

559. Re: Source for high-Q HF inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-24 17:15:45 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <7tmll.202047$Yx2.65263@en-nntp-06.dc1.easynews.com>
Source record: 2862

Thanks for the information, guys -- it's very useful. I'll plan on winding my own coils initially, I guess.

Hey, weren't we supposed to have room-temperature super-conducting wires by now!? <<Grumble>>

---Joel

560. Re: Source for high-Q HF inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-24 18:07:34 UTC
From: Lawrence Statton <yankeeinexile@gmail.com>
Message-ID: <m1fxfygc2h.fsf@mac.gateway.2wire.net>
Source record: 2863

"Joel Koltner" <zapwireDASHgroups@yahoo.com> writes:
>
> Hey, weren't we supposed to have room-temperature super-conducting wires by
> now!? <<Grumble>>
>

That and hover-cars. Where's my hover-car? You kids get off my lawn!

-n1gak

561. Re: Source for high-Q HF inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-24 18:34:22 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <c42c4e89-9b6f-4831-810d-a7703f1d23fb@p11g2000yqe.googlegroups.com>
Source record: 2864

On Apr 24, 2:07 pm, Lawrence Statton <yankeeinex...@gmail.com> wrote:
> "Joel Koltner" <zapwireDASHgro...@yahoo.com> writes:
>
> > Hey, weren't we supposed to have room-temperature super-conducting wires by
> > now!? <<Grumble>>
>
> That and hover-cars. Where's my hover-car? You kids get off my lawn!

I want a pair of jet pants, so I can pull them on and fly off the
balcony like Astro Boy!

Tim.

562. Crystal Diode Books

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-24 20:07:46 UTC
From: David <DavidBR549@gmail.com>
Message-ID: <3ac4bd52-0ca1-40ee-a5da-9014fd8dcda1@x3g2000yqa.googlegroups.com>
Source record: 2865

2 books everyone should have are, (Crystal Diode Circuit Kinks by Sylvania Electric Products) and (40 Uses for Germanium Diodes by Sylvania Electric Products) These have lots of simple circuits from ham radio to the experimenter or crystal radio and even test equipment.

563. Re: XTAL Radio Receiver Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-25 00:35:00 UTC
From: Bill M <radioexray@geeemail.com>
Message-ID: <gstlrl01jsk@news4.newsguy.com>
Source record: 2866

David wrote:
> On Apr 20, 1:34 pm, David <DavidBR...@gmail.com> wrote:
>> Looking for Crystal Radio Receiver Circuits, that have a voltage
>> quadrupler to increase headphone volume without batteries or AC power.
>
> On my original post i was, and still looking for a quadrupler circuit,
> not information on why it does not work.

Sorry. Frankly I've never seen one but I guess you could lash something
together easy enough. May try asking over at the Rap-n-Tap forum. If
anybody knows of one that group would surely know.

Rgds,
Bill

564. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-25 02:20:42 UTC
From: Phil Allison <philallison@tpg.com.au>
Message-ID: <75fabnF16u8dhU1@mid.individual.net>
Source record: 2867
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

<aj-smith@blueyonder.co.uk
Tim Shoppa
> A terminology question I suppose about the derivation of the term
> "Superheterodyne" more than anything else:

I think that the way to answer a question like this is to try to find
written material which originated as close as possible in time to the
introduction of the term in question. Wikki entries should give
references to original material, but of course those are not always
easy for everyone to find, and to study.

** All one had to do was follow up on the "external links" at the end of
the superhet Wiki

http://en.wikipedia.org/wiki/Superheterodyne_receiver

the very first one of which is:

http://antiqueradios.com/superhet/

Then go to footnote #11:

" Armstrong, "A New System of Short Wave Amplification," Proc. I.R.E. 9
(Feb. 1921), pp. 3-27. QST 3 (Feb. 1920), pp.5-9, 13.
This paper uses the term superaudible heterodyne, from which superheterodyne
is derived. The British tended to use supersonic. Incidentally, the first
use of the word superheterodyne that I have seen, is in QST for March 1921
(p.41) but evidently from the context it was in common use by then. "

Note the reference to " superaudible heterodyne " is from 1921 and Armstrong
himself !!

Also it explains how the Poms (Armstrong was an American) liked to use
"supersonic" in relation to those frequencies above the audible range.

The best that I can do in the way of original references with the
books on my shelves is to quote from the 'Admiralty Handbook of
Wireless Telegraphy 1931', HMSO, London, 1932. On page 721 is written
- '... This use of amplification at a frequency intermediate between
that of the incoming signal and an audible frequency gives this
circuit its name of super-heterodyne, or supersonic heterodyne
receiver'.

** Fine, but that book is ten years later and has no direct connection to Armstrong's invention.

The discussion goes on to describe an Admiralty receiver having an IF frequency of 30kHz, which is just what you would expect a supersonic frequency to be. To my mind this settles the question.

** The Q was settled by the first couple of replies Shoppa got here - but he simply had no interest in having one of his mad, pet theories proved wrong so easily.

Shoppa was trolling as usual and no simple facts were not gonna spoil his puerile mischief.

..... Phil

565. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-25 08:54:32 UTC
From: Bob Larter <bobbylarter@gmail.com>
Message-ID: <gsuj20$1p0$1@blackhelicopter.databasix.com>
Source record: 2868
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

mikea wrote:
[Philthy snipped]

> Killfile, Phil. Phil, killfile.

Hi Mike, nice to see you here!

--
W
. | ,. w , "Some people are alive only because
\|/ \|/ it is illegal to kill them." Perna condita delenda est
---^----^--

566. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-25 13:58:28 UTC
From: Highland Ham <rfburns@allbands.net>
Message-ID: <VYedncMIoKp2i27UnZ2dnUVZ8t-dnZ2d@pipex.net>
Source record: 2869
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Phil Allison wrote:
> "Eeysore the Fucking LIAR "
>
>> Supersonic today means travelling faster than the speed of sound.
>
>
> ** Not when the context is frequency - you fucking MORON.
>
> http://en.wiktionary.org/wiki/supersonic
>
>
>
> ..... Phil
>
>
==========

Phil ,It will be a relief to all (civilised) users of this NG ,if you would discharge your life's frustrations onto another more appropriate NG. It is clear ,to me at least ,that you need help.

Frank GM0CSZ / KN6WH

567. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-25 14:14:08 UTC
From: Phil Allison <philallison@tpg.com.au>
Message-ID: <75gk5cF18ii7eU1@mid.individual.net>
Source record: 2870
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

"Highland Ham"

** Whoopeee !!!!

Another totally anencephalic, radio ham wack-job opens his dumb gob.

>> "Eeysore the Fucking LIAR "
>>
>>> Supersonic today means travelling faster than the speed of sound.
>>
>>
>> ** Not when the context is frequency - you fucking MORON.
>>
>> http://en.wiktionary.org/wiki/supersonic
>>

>
> ==========
> Phil ,

** Never address me personally via any NG

- you pig ignorant CUNT.

> It will be a relief to all (civilised) users of this NG

** Leaves all self appointed, net cop cunts like you out

- don't it ???

> Frank GM0CSZ / KN6WH

** Fuck the hell off - Frank.

IMO, radio hams are the scum of the earth.

Go stick your stupid, smug opinions straight up your FAT ARSE.

..... Phil

568. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-25 17:16:42 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <PLKdnZVRV-ni2G7UnZ2dnUVZ_vudnZ2d@earthlink.com>
Source record: 2871
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

```
Highland Ham wrote:
>
> Phil Allison wrote:
> > "Eeysore the Fucking LIAR "
> >
> >> Supersonic today means travelling faster than the speed of sound.
> >
> >
> > ** Not when the context is frequency - you fucking MORON.
> >
> > http://en.wiktionary.org/wiki/supersonic
> >
> >
> >
> > ....... Phil
> >
> >
> ==========================================
> Phil ,It will be a relief to all (civilised) users of this NG ,if you
> would discharge your life's frustrations onto another more appropriate
> NG. It is clear ,to me at least ,that you need help.

Killfile him, for your own sanity.

--
You can't have a sense of humor, if you have no sense!
```

569. Join the Most Exclusive Club on 20M!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-25 22:13:22 UTC
From: kludge@panix.com
Message-ID: <gt01u2grg1@panix2.panix.com>
Source record: 2872
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Perhaps you've heard of the Colorburst Club, that elite band of 80M hams that hang out around the colorburst frequency using homebrew rigs and crystals scrapped from old TV sets.

Now is your chance to become a part of a group so much more restricted that perhaps you've never heard of it before. You see, 14.31818 is a standard microprocessor clock frequency, and consequently there are surplus crystals available for it, right in the middle of the soon to be active twenty-meter amateur band. And you can join the specialized and esoteric bunch who hang out there.

All you need to do is send me $1 for your pair of 14.31818 MHz crystals, and you can do with them what you like. You can use them in your own homebrew QRP rig, or in an exciter driving a commercial transmitter to the legal limit. There's no end to the fun you can have when you have the power and the glory of being able to hang out with the best of the best on 14.31818. These crystals are made of genuine quartz, carefully A-T cut by anonymous and unknown craftsmen in a distant land, and then lapped to frequency with actual abrasives. You can use them to talk anywhere in the world.

Once you're on 14.31818 you'll be one of a tight group of people so secret that nobody knows who they are. Other clubs issue certificates of membership, but the 14.31818 club is SO SECRET that we won't give it away that you're a member by issuing a certificate. Only you will know for sure that you have the honor of being a member.

Is this whole thing actually a ploy for me to unload a lot of surplus microprocessor crystals? Of course. My wife is threatening to throw them out if I don't get them out of the living room. But that in no way diminishes the importance of this club. So don't delay, send your money now.
--scott

--
"C'est un Nagra. C'est suisse, et tres, tres precis."

570. Experimenting with Coils for Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-26 00:23:06 UTC
From: David <DavidBR549@gmail.com>
Message-ID: <88950a76-bcf3-4e0d-bd7d-67700339d036@q33g2000pra.googlegroups.com>
Source record: 2873

Was just wandering if anyone has used or experimented with television
IF, Video and Detector coils, most are slug tuned coils that have a
few uh to several hundred uh, some are sheilded some are not, i have
about 500 that i bought years ago, a lot of them look very close too
the old loopstick type coils, looking for
ideas.
Thanks David

571. Re: Experimenting with Coils for Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-26 00:40:56 UTC
From: Bill M <radioexray@geeemail.com>
Message-ID: <gt0aj401jbe@news6.newsguy.com>
Source record: 2874

David wrote:
> Was just wandering if anyone has used or experimented with television
> IF, Video and Detector coils, most are slug tuned coils that have a
> few uh to several hundred uh, some are sheilded some are not, i have
> about 500 that i bought years ago, a lot of them look very close too
> the old loopstick type coils, looking for
> ideas.
> Thanks David

I got beat up on my last reply offering comments....but, whatever.

The small slug tuned HF coils in cans really have no place in crystal radio circuits. However, the long ferrite rod loopstick coils are quite good and are popular.

I'll offer an invitation to http://theradioboard.com/rb/ if you aren't familiar with the site. You should be able to scrounge up some additonal suggestions there.

-Bill

572. Heath CM-1

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-26 03:20:26 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <99cd2260-079d-4b16-ba3a-4c8c74d7b7c9@v23g2000pro.googlegroups.com>
Source record: 2875

Many years ago I converted a CM-1 capacitance meter to solid state using a 555 osc in place of the tube circuit. I no longer have the meter or the schematic I developed. I was wondering if anyone else had done this hoping I would not have to reinvent the wheel again. Knowing the osc frequecies for the various ranges whould be a huge help at giving me a starting point. Otherwise I will probably have to borrow a function generator.

Jimmie

573. Re: Experimenting with Coils for Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-26 03:51:46 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <jv2dnX42nKLOR27UnZ2dnUVZ_sydnZ2d@web-ster.com>
Source record: 2876

David wrote:
> Was just wandering if anyone has used or experimented with television
> IF, Video and Detector coils, most are slug tuned coils that have a
> few uh to several hundred uh, some are sheilded some are not, i have
> about 500 that i bought years ago, a lot of them look very close too
> the old loopstick type coils, looking for
> ideas.
> Thanks David

They'll have very low Q, and therefore not really be suitable for a crystal radio, where low-Q coils fight your ability to get good selectivity without burning up all your signal before it gets to the headphones.

There's a whole bunch of _other_ cool things you can do with them, just not Xtal sets.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Do you need to implement control loops in software?
"Applied Control Theory for Embedded Systems" was written for you.
See details at http://www.wescottdesign.com/actfes/actfes.html

574. Re: Source for high-Q HF inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-26 08:17:14 UTC
From: JC Morrice <John@pentode.demon.co.uk>
Message-ID: <BVH0tKAKiB9JFwn8@pentode.demon.co.uk>
Source record: 2877

In article <c42c4e89-9b6f-4831-810d-a7703f1d23fb@p11g2000yqe.googlegroup
s.com>, Tim Shoppa <shoppa@trailing-edge.com> writes

>On Apr 24, 2:07ï¿½pm, Lawrence Statton <yankeeinex...@gmail.com> wrote:
>> "Joel Koltner" <zapwireDASHgro...@yahoo.com> writes:
>>
>> > Hey, weren't we supposed to have room-temperature super-conducting wires by
>> > now!? ï¿½<<Grumble>>
>>
>> That and hover-cars. ï¿½Where's my hover-car? ï¿½You kids get off my lawn!
>
>I want a pair of jet pants, so I can pull them on and fly off the
>balcony like Astro Boy!

Yeah - and all the other stuff that in the past they said we would have
by now. I want my stuff..... :D

http://www.davidszondy.com/future/futurepast.htm

John
G0QAJ
--
JC Morrice
john@pentode.demon.co.uk

575. Re: Experimenting with Coils for Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-26 10:54:56 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <089cfa56-a232-47b6-adfa-9531d29f32ba@v23g2000pro.googlegroups.com>
Source record: 2878

On Apr 25, 11:51 pm, Tim Wescott <t...@seemywebsite.com> wrote:
> David wrote:
> > Was just wandering if anyone has used or experimented with television
> > IF, Video and Detector coils, most are slug tuned coils that have a
> > few uh to several hundred uh, some are sheilded some are not, i have
> > about 500 that i bought years ago, a lot of them look very close too
> > the old loopstick type coils, looking for
> > ideas.
> > Thanks David
>
> They'll have very low Q, and therefore not really be suitable for a
> crystal radio, where low-Q coils fight your ability to get good
> selectivity without burning up all your signal before it gets to the
> headphones.
>
> There's a whole bunch of _other_ cool things you can do with them, just
> not Xtal sets.
>
> --
>
> Tim Wescott
> Wescott Design Serviceshttp://www.wescottdesign.com
>
> Do you need to implement control loops in software?
> "Applied Control Theory for Embedded Systems" was written for you.
> See details athttp://www.wescottdesign.com/actfes/actfes.html

I tinkered around a lot with crystal radios back when I was a kid. It
seemed that the most important thing was matching the impedance of the
radio to the antenna. This is much more critical on crystal set than a
modern superhet The only ham in the county impressed me very much with
what a crystal set could do if properly matched to a good antenna
system. He had worked all the states and a lot of the countries using
a crystal radio as his rx. I do think he kind of cheated though by
finding the signal on his regular station rx and then listening for it
on the crystal set.

Jimmie

576. Re: Experimenting with Coils for Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-26 18:23:14 UTC
From: Bob <biascomms@invalid.inv>
Message-ID: <75jn31F18cr5cU1@mid.individual.net>
Source record: 2879

David wrote:

> Was just wandering if anyone has used or experimented with television
> IF, Video and Detector coils, most are slug tuned coils that have a
> few uh to several hundred uh, some are sheilded some are not, i have
> about 500 that i bought years ago, a lot of them look very close too
> the old loopstick type coils, looking for
> ideas.

Unfortunately, the *Q* of those coils will be much too low for effective use in crystal receivers. The best results I've had with "no power" receivers involved the use of FET detectors and /very/ High-Q coils. The inductors usually have to be large diameter air-cored, but you can get away with toroid or ferrite rod types if you can accept poorer results. It's quite illuminating to browse the offerings on the web.

Bob

577. Re: Experimenting with Coils for Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-27 03:31:24 UTC
From: Bill Janssen <billj@ieee.org>
Message-ID: <2F9JI.91349$GU6.3575@newsfe09.iad>
Source record: 2880

Bob wrote:
> David wrote:
>
>
>> Was just wandering if anyone has used or experimented with television
>> IF, Video and Detector coils, most are slug tuned coils that have a
>> few uh to several hundred uh, some are sheilded some are not, i have
>> about 500 that i bought years ago, a lot of them look very close too
>> the old loopstick type coils, looking for
>> ideas.
>>
>
> Unfortunately, the *Q* of those coils will be much too low for effective use
> in crystal receivers. The best results I've had with "no power" receivers
> involved the use of FET detectors and /very/ High-Q coils. The inductors
> usually have to be large diameter air-cored, but you can get away with toroid
> or ferrite rod types if you can accept poorer results. It's quite
> illuminating to browse the offerings on the web.
>
> Bob
How about making an Air Core Toroid. That can be made using a wax core.
Then after winding it,
some QDope or something in strips to hold the windings and then melting
the wax. Or maybe a foam
plastic core.

Bill K7NOM

578. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-27 05:11:20 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <uafav4psjf2j0msjdf3k69gn14l3jqjlo0@4ax.com>
Source record: 2881
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Tue, 21 Apr 2009 05:34:25 -0700 (PDT), Tim Shoppa
<shoppa@trailing-edge.com> wrote:

>On Apr 21, 1:05 am, "Phil Allison" <philalli...@tpg.com.au> wrote:
>> "AF6AY"
>>
>> > Everyone ought to realize that "Wikipedia" data can be written by
>> > ANYONE
>>
>> ** As are NG posts.
>>
>> The difference being that Wikis are full of checkable references and are
>> subject to on-going correction.
>
>The best Wikipedia articles are often filled with good checkable
>references, but other times it sounds like they were written in a
>foreign language and translated into English and have few (if any)
>good references.
>
>Just because a Wikipedia entry isn't well-written or sounds awkward
>doesn't mean it's wrong, but I will often reject what I don't like in
>the poorly written ones.
>
>Somewhere there's a bunch of people who spend their time correcting
>and improving Wikipedia entries, and I think overall they are doing a
>good job, but that doesn't mean the result is always devoted to my
>interests. Just like anything else in this world, it's got workers and
>it's got managers and they aren't always devoting their attention to
>the little corners of arcania that I live in.
>
>It's not that the Encyclopedia Britannica is perfect either. I can
>open it up to the very few subjects that I happen to be expert on and
>find over-simplifications and a lack of cites to what I consider to be
>the best references. That doesn't mean it's out-and-out wrong, just
>that it's an Encyclopedia, and by definition they can't do anything
>but touch on the surface of all the interesting stuff in the world.
>
>Of course in academia I got real used to opening a journal and instead
>of reading the articles, to go straight to the references and see if
>they are quoting one of my articles :-). Breadth vs specialization,
>can't pick them both.
>
>Tim.

Just the same, i try. perhaps my approach can be better described as having adequate coverage at adequate depth. Or sort of turning thinge sideways and trying to get best area with a very complex shape with many largish estensions in some areas and virtually none in other places. Knowledge is kind of fractal any way.
.

579. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-27 05:19:41 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <pvfav4dvg8ovh7no66mvnmjb8pugq4njso@4ax.com>
Source record: 2882
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Thu, 23 Apr 2009 11:27:37 -0400, Phil Hobbs
<pcdhSpamMeSenseless@electrooptical.net> wrote:

>John Larkin wrote:
>> On Mon, 20 Apr 2009 09:50:05 -0700 (PDT), Tim Shoppa
>> <shoppa@trailing-edge.com> wrote:
>>
>>> A terminology question I suppose about the derivation of the term
>>> "Superheterodyne" more than anything else:
>>>
>>> Does the "Super" actually mean anything? Is there a Subheterodyne?
>>>
>>> Traditionally superhets mix a higher radio frequency down to a lower
>>> IF frequency, but certainly in the past few decades radios with IF's
>>> above the RF frequency have become very common in broadband
>>> applications, and those are still called superhets, not subhets :-).
>>>
>>> Google turns up a couple hits on subheterodyne but other than one that
>>> might mean "IF higher in frequency than RF" I don't recognize what
>>> they mean..
>>>
>>> I suspect that "Super" was more a marketing term than anything
>>> else :-).
>>>
>>> Tim N3QE
>>
>> Supersonic.
>>
>> http://en.wikipedia.org/wiki/Superheterodyne_receiver
>>
>>
>> John
>>
>
>Not a bad article, except that he seems to think that cascading multiple
>stages at a single IF improves image rejection, and that very high IFs
>are much less common than double conversion. (Does *anyone* use double
>conversion anymore? Spur city.)

Double conversion may be thought to be passe an awful lot of sattelite
TV receivers are double conversion or triple conversion. Think LNB.
.

580. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-27 05:26:34 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <jdgav4h6acuaje2c4un5e624941bu80tlp@4ax.com>
Source record: 2883
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Tue, 21 Apr 2009 17:38:47 -0700, Joerg
<notthisjoergsch@removethispacbell.net> wrote:

>TheM wrote:
>> "Robert Baer" <robertbaer@localnet.com> wrote in message
news:taqdnWXbhNru4HDUnZ2dnUVZ_vOdnZ2d@posted.localnet...
>>> Joerg wrote:
>>>
>>>> John Larkin wrote:
>>>>
>>>>> On Mon, 20 Apr 2009 12:36:12 -0700, Joerg
>>>>> <notthisjoergsch@removethispacbell.net> wrote:
>>>>>
>>>>>> Tim Shoppa wrote:
>>>>>>
>>>>>>> A terminology question I suppose about the derivation of the term
>>>>>>> "Superheterodyne" more than anything else:
>>>>>>>
>>>>>>> Does the "Super" actually mean anything? Is there a Subheterodyne?
>>>>>>>
>>>>>>> Traditionally superhets mix a higher radio frequency down to a lower
>>>>>>> IF frequency, but certainly in the past few decades radios with IF's
>>>>>>> above the RF frequency have become very common in broadband
>>>>>>> applications, and those are still called superhets, not subhets :-).
>>>>>>>
>>>>>>> Google turns up a couple hits on subheterodyne but other than one that
>>>>>>> might mean "IF higher in frequency than RF" I don't recognize what
>>>>>>> they mean..
>>>>>>>
>>>>>>> I suspect that "Super" was more a marketing term than anything
>>>>>>> else :-).
>>>>>>>
>>>>>> If you want to file a new patent for old stuff you could try subheterodyne and it
just might sail through :-)
>>>>>>
>>>>>> Oh wait, call it hyperheterodyne, has more glitz. Just like the supermercados in
Spain.
>>>>>
>>>>> I meant hypermercados :-)
>>>>
>>>>
>>>>> I think we're going to be doing a superhet receiver soon. Maybe we'll
>>>>> do it in an FPGA!

>>>>>
>>>> How'd you do the preamp in there?
>>>>
>>> Bit shift?
>>
>> Yes, but 2x zero is still zero... :)
>>
>> M
>
>... +/-3dB.

That's it. You are now on the list of posters that are not safe to
read with a mouthful.
.

581. Re: Experimenting with Coils for Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-27 12:32:07 UTC
From: David <DavidBR549@gmail.com>
Message-ID: <277330a1-b3f5-4246-a82d-6b7fabfca602@d25g2000prn.googlegroups.com>
Source record: 2884

On Apr 25, 10:51 pm, Tim Wescott <t...@seemywebsite.com> wrote:
> David wrote:
> > Was just wandering if anyone has used or experimented with television
> > IF, Video and Detector coils, most are slug tuned coils that have a
> > few uh to several hundred uh, some are sheilded some are not, i have
> > about 500 that i bought years ago, a lot of them look very close too
> > the old loopstick type coils, looking for
> > ideas.
> > Thanks David
>
> They'll have very low Q, and therefore not really be suitable for a
> crystal radio, where low-Q coils fight your ability to get good
> selectivity without burning up all your signal before it gets to the
> headphones.
>
> There's a whole bunch of _other_ cool things you can do with them, just
> not Xtal sets.
>
> --
>
> Tim Wescott
> Wescott Design Serviceshttp://www.wescottdesign.com
>
> Do you need to implement control loops in software?
> "Applied Control Theory for Embedded Systems" was written for you.
> See details athttp://www.wescottdesign.com/actfes/actfes.html

What would be a good Q range for AM broadcast & Shortwave bands.
Another thing is that a lot of these coils have only one coil on a
form like an adjustable loopstick, maybe i'll never know unless i try
them. Holding them next to each other they look alike.

582. Re: Experimenting with Coils for Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-27 12:40:27 UTC
From: David <DavidBR549@gmail.com>
Message-ID: <ae7ad27b-ab79-4ac1-9678-236093cf22b4@v1g2000prd.googlegroups.com>
Source record: 2885

On Apr 26, 10:31 pm, Bill Janssen <bi...@ieee.org> wrote:
> Bob wrote:
> > David wrote:
>
> >> Was just wandering if anyone has used or experimented with television
> >> IF, Video and Detector coils, most are slug tuned coils that have a
> >> few uh to several hundred uh, some are sheilded some are not, i have
> >> about 500 that i bought years ago, a lot of them look very close too
> >> the old loopstick type coils, looking for
> >> ideas.
>
> > Unfortunately, the *Q* of those coils will be much too low for effective use
> > in crystal receivers. The best results I've had with "no power" receivers
> > involved the use of FET detectors and /very/ High-Q coils. The inductors
> > usually have to be large diameter air-cored, but you can get away with toroid
> > or ferrite rod types if you can accept poorer results. It's quite
> > illuminating to browse the offerings on the web.
>
> > Bob
>
> How about making an Air Core Toroid. That can be made using a wax core.
> Then after winding it,
> some QDope or something in strips to hold the windings and then melting
> the wax. Or maybe a foam
> plastic core.
>
> Bill K7NOM- Hide quoted text -
>
> - Show quoted text -

Have used glue from a hot glue gun before, the coils will never move
once the glue sets.

583. Re: Experimenting with Coils for Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-27 13:22:35 UTC
From: Bill M <radioexray@geeemail.com>
Message-ID: <gt4bjj028rh@news7.newsguy.com>
Source record: 2886

Bill Janssen wrote:

> How about making an Air Core Toroid. That can be made using a wax core.
> Then after winding it,
> some QDope or something in strips to hold the windings and then melting
> the wax. Or maybe a foam
> plastic core.
>
> Bill K7NOM

There was a manufacturer in the 20s that used a coil like that. Thorola - they called them donut coils. Looks like they just wound them on a small form, maybe 1 inch, and then slid it off and bent it around afterwards into the form of a donut.

Never heard any comment yeah or nay about their efficacy.

-Bill M

584. Re: Experimenting with Coils for Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-27 16:15:30 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <2310c5d3-c948-4ced-bb49-22fec5a79bb3@a5g2000pre.googlegroups.com>
Source record: 2887

On Apr 27, 9:22 am, Bill M <radioex...@geeemail.com> wrote:
> Bill Janssen wrote:
> > How about making an Air Core Toroid. That can be made using a wax core.
> > Then after winding it,
> > some QDope or something in strips to hold the windings and then melting
> > the wax. Or maybe a foam
> > plastic core.
>
> > Bill K7NOM
>
> There was a manufacturer in the 20s that used a coil like that. Thorola
> - they called them donut coils. Looks like they just wound them on a
> small form, maybe 1 inch, and then slid it off and bent it around
> afterwards into the form of a donut.
>
> Never heard any comment yeah or nay about their efficacy.
>
> -Bill M

I think the best one I ever made used an oatmeal box for a form. Big
air core coils seems to be the way to go. I built a kit that used a
pair of loopstick coils and the best I could ever do wiith it was a
couple of local stations. I think it was a Heathkit. A good RF ground
seemed to benifit the receiver more than the antenna. Back in the day
my father had a service station with about two acres of concrete out
front. I was able to connect into a ground point that hooked it up to
all the wire and rebar in the concrete.

Jimmie

585. Re: Experimenting with Coils for Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-27 17:30:41 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <7aqbv4tc4t83ppudunqerpmmlp7pgsnug4@4ax.com>
Source record: 2888

On Mon, 27 Apr 2009 05:32:07 -0700 (PDT), David <DavidBR549@gmail.com>
wrote:

>On Apr 25, 10:51ï¿½pm, Tim Wescott <t...@seemywebsite.com> wrote:
>> David wrote:
>> > Was just wandering if anyone has used or experimented with television
>> > IF, Video and Detector coils, most are slug tuned coils that have a
>> > few uh to several hundred uh, some are sheilded some are not, i have
>> > about 500 that i bought years ago, a lot of them look very close too
>> > the old loopstick type coils, looking for
>> > ideas.
>> > Thanks David
>>
>> They'll have very low Q, and therefore not really be suitable for a
>> crystal radio, where low-Q coils fight your ability to get good
>> selectivity without burning up all your signal before it gets to the
>> headphones.
>>
>> There's a whole bunch of _other_ cool things you can do with them, just
>> not Xtal sets.
>>
>> --
>>
>> Tim Wescott
>> Wescott Design Serviceshttp://www.wescottdesign.com
>>
>> Do you need to implement control loops in software?
>> "Applied Control Theory for Embedded Systems" was written for you.
>> See details athttp://www.wescottdesign.com/actfes/actfes.html
>
>What would be a good Q range for AM broadcast & Shortwave bands.

If your _loaded_ Q is 100, the -3 dB bandwidth at 1 MHz would be 10
kHz (i.e. +/- 5 kHz from the carrier). The question is, what should
the _un_loaded Q be ?

If you have a full sized antenna, the signal strength would be
sufficient even with an unloaded Q of just 100-200.

At the middle of the HF band (10 MHz) a loaded Q of 1000 would be
required for a single station bandwidth and quite large helical
resonators would be required to get a usable unloaded Q without
damping the resonant circuit Q too much.

Paul OH3LWR

586. Re: Experimenting with Coils for Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-27 20:43:41 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <gOadnQSe0q9jhWvUnZ2dnUVZ_uGdnZ2d@web-ster.com>
Source record: 2889

Paul Keinanen wrote:
> On Mon, 27 Apr 2009 05:32:07 -0700 (PDT), David <DavidBR549@gmail.com>
> wrote:
>
>> On Apr 25, 10:51 pm, Tim Wescott <t...@seemywebsite.com> wrote:
>>> David wrote:
>>>> Was just wandering if anyone has used or experimented with television
>>>> IF, Video and Detector coils, most are slug tuned coils that have a
>>>> few uh to several hundred uh, some are sheilded some are not, i have
>>>> about 500 that i bought years ago, a lot of them look very close too
>>>> the old loopstick type coils, looking for
>>>> ideas.
>>>> Thanks David
>>> They'll have very low Q, and therefore not really be suitable for a
>>> crystal radio, where low-Q coils fight your ability to get good
>>> selectivity without burning up all your signal before it gets to the
>>> headphones.
>>>
>>> There's a whole bunch of _other_ cool things you can do with them, just
>>> not Xtal sets.
>>>
>>> --
>>>
>>> Tim Wescott
>>> Wescott Design Serviceshttp://www.wescottdesign.com
>>>
>>> Do you need to implement control loops in software?
>>> "Applied Control Theory for Embedded Systems" was written for you.
>>> See details athttp://www.wescottdesign.com/actfes/actfes.html
>> What would be a good Q range for AM broadcast & Shortwave bands.
>
> If your _loaded_ Q is 100, the -3 dB bandwidth at 1 MHz would be 10
> kHz (i.e. +/- 5 kHz from the carrier). The question is, what should
> the _un_loaded Q be ?
>
> If you have a full sized antenna, the signal strength would be
> sufficient even with an unloaded Q of just 100-200.
>
> At the middle of the HF band (10 MHz) a loaded Q of 1000 would be
> required for a single station bandwidth and quite large helical
> resonators would be required to get a usable unloaded Q without
> damping the resonant circuit Q too much.
>
> Paul OH3LWR

>
What Paul didn't mention is that the ratio between the unloaded and
loaded Q is pretty much the ratio between the energy coming from the
antenna and the energy that's wasted in the tank.

I.e. if your unloaded Q equals your loaded Q, then you're using up _all_
the energy in the tank, and there's none left over for your headphones.
If your unloaded Q is 200 and your loaded is the 100 that you'd want
for AM reception, you're using as much energy heating up your tank
circuit as you are using to drive your headphones.

So insanely efficient tank circuits are a necessity for a crystal set.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Do you need to implement control loops in software?
"Applied Control Theory for Embedded Systems" was written for you.
See details at http://www.wescottdesign.com/actfes/actfes.html

587. Re: Experimenting with Coils for Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-27 22:49:18 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <naccv49oa82e8kb19q9po7sb9235viqms1@4ax.com>
Source record: 2890

On Mon, 27 Apr 2009 13:43:41 -0700, Tim Wescott <tim@seemywebsite.com>
wrote:

>Paul Keinanen wrote:
>> On Mon, 27 Apr 2009 05:32:07 -0700 (PDT), David <DavidBR549@gmail.com>
>> wrote:
>>
>>> On Apr 25, 10:51 pm, Tim Wescott <t...@seemywebsite.com> wrote:
>>>> David wrote:
>>>>> Was just wandering if anyone has used or experimented with television
>>>>> IF, Video and Detector coils, most are slug tuned coils that have a
>>>>> few uh to several hundred uh, some are sheilded some are not, i have
>>>>> about 500 that i bought years ago, a lot of them look very close too
>>>>> the old loopstick type coils, looking for
>>>>> ideas.
>>>>> Thanks David
>>>> They'll have very low Q, and therefore not really be suitable for a
>>>> crystal radio, where low-Q coils fight your ability to get good
>>>> selectivity without burning up all your signal before it gets to the
>>>> headphones.
>>>>
>>>> There's a whole bunch of _other_ cool things you can do with them, just
>>>> not Xtal sets.
>>>>
>>>> --
>>>>
>>>> Tim Wescott
>>>> Wescott Design Serviceshttp://www.wescottdesign.com
>>>>
>>>> Do you need to implement control loops in software?
>>>> "Applied Control Theory for Embedded Systems" was written for you.
>>>> See details athttp://www.wescottdesign.com/actfes/actfes.html
>>> What would be a good Q range for AM broadcast & Shortwave bands.
>>
>> If your _loaded_ Q is 100, the -3 dB bandwidth at 1 MHz would be 10
>> kHz (i.e. +/- 5 kHz from the carrier). The question is, what should
>> the _un_loaded Q be ?
>>
>> If you have a full sized antenna, the signal strength would be
>> sufficient even with an unloaded Q of just 100-200.
>>
>> At the middle of the HF band (10 MHz) a loaded Q of 1000 would be
>> required for a single station bandwidth and quite large helical
>> resonators would be required to get a usable unloaded Q without

>> damping the resonant circuit Q too much.
>>
>> Paul OH3LWR
>>
>What Paul didn't mention is that the ratio between the unloaded and
>loaded Q is pretty much the ratio between the energy coming from the
>antenna and the energy that's wasted in the tank.
>
>I.e. if your unloaded Q equals your loaded Q, then you're using up _all_
>the energy in the tank, and there's none left over for your headphones.
> If your unloaded Q is 200 and your loaded is the 100 that you'd want
>for AM reception, you're using as much energy heating up your tank
>circuit as you are using to drive your headphones.

I fully agree with this. With a Qu/Ql ratio 2:1 you end up with only 6 dB insertion loss.

However, the antenna capture area and hence the captured power (for a constant field strength and hence constant power density) is inversely proportional to the square of frequency (-6 dB/octave).

While a 1/2 wavelength dipole might be sufficient to feed a crystal detector at 1 MHz, a 1/2 wave dipole at 10 MHz will unfortunately produce only 1/100 the power.

Paul OH3LWR

588. Re: Source for high-Q HF inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-27 23:30:35 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <werJl.15475$%54.9869@nlpi070.nbdc.sbc.com>
Source record: 2891

Joel Koltner wrote:
> Are there some vendors of readily available (stock) inductors that have
> reasonably good Q's (>100) throughout the HF band?
>
> I'm familiar with something like the Coilcraft "maxi springs"
> (http://coilcraft.com/maxi.cfm), and while they hit Q's of 100 by 30MHz, I'd
> really like something that's already there by 3MHz or less (...and still have
> a self-resonant frequency of >30MHz). This seems quite doable simply by
> making a larger coil with thicker wire, I'd just like to find a place that
> offers such inductors off-the-shelf rather than having to wind my own.
> Inductance in the ballpark of 1-10uH would be good, although it's not
> critical.
>
> The goal here is to try out making some adjustable notch filters for a
> receiver (by switching L's and C's in and out, like antenna tuners do).
> Hence, high Q is important, but power handling capability isn't so much, and
> anything smaller than a breadbox is fine size-wise.
>

There isn't much of a market for this stuff anymore, at least not since
the days of cloth-insulated wire :-)

Since it's for a receiver, how about building a Q-multiplier? Ok, many
youngster will scoff at that as being "archaic" but those things can
really rock.

--
Regards, Joerg

http://www.analogconsultants.com/

589. Re: Experimenting with Coils for Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-27 23:34:23 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <7c5cb0df-a6c7-471a-9dda-83712234fa12@v1g2000prd.googlegroups.com>
Source record: 2892

On Apr 27, 10:30 am, Paul Keinanen <keina...@sci.fi> wrote:
> On Mon, 27 Apr 2009 05:32:07 -0700 (PDT), David <DavidBR...@gmail.com>
> wrote:
>
>
>
> >On Apr 25, 10:51 pm, Tim Wescott <t...@seemywebsite.com> wrote:
> >> David wrote:
> >> > Was just wandering if anyone has used or experimented with television
> >> > IF, Video and Detector coils, most are slug tuned coils that have a
> >> > few uh to several hundred uh, some are sheilded some are not, i have
> >> > about 500 that i bought years ago, a lot of them look very close too
> >> > the old loopstick type coils, looking for
> >> > ideas.
> >> > Thanks David
>
> >> They'll have very low Q, and therefore not really be suitable for a
> >> crystal radio, where low-Q coils fight your ability to get good
> >> selectivity without burning up all your signal before it gets to the
> >> headphones.
>
> >> There's a whole bunch of _other_ cool things you can do with them, just
> >> not Xtal sets.
>
> >> --
>
> >> Tim Wescott
> >> Wescott Design Serviceshttp://www.wescottdesign.com
>
> >> Do you need to implement control loops in software?
> >> "Applied Control Theory for Embedded Systems" was written for you.
> >> See details athttp://www.wescottdesign.com/actfes/actfes.html
>
> >What would be a good Q range for AM broadcast & Shortwave bands.
>
> If your _loaded_ Q is 100, the -3 dB bandwidth at 1 MHz would be 10
> kHz (i.e. +/- 5 kHz from the carrier). The question is, what should
> the _un_loaded Q be ?
>
> If you have a full sized antenna, the signal strength would be
> sufficient even with an unloaded Q of just 100-200.
>
> At the middle of the HF band (10 MHz) a loaded Q of 1000 would be
> required for a single station bandwidth and quite large helical

> resonators would be required to get a usable unloaded Q without
> damping the resonant circuit Q too much.
>
> Paul OH3LWR

To put some numbers on what Paul suggested:

If I want an unloaded coil Q of 2000 at 10MHz, I'd expect to need a coil about 5 inches (13cm) diameter and 10 inches (26cm) long--or similar. That assumes no loss to radiation. If I shield it to make a helical resonator, the Q will actually be lowered slightly, though such a large coil may have enough loss to radiation that it would be a wash between turning it into a helical resonator or leaving it in free air. Of course, with the shielding, it's less susceptible to changes in the environment around it. Anyway, the shield for a helical resonator should be a couple times the diameter of the coil, so it's a rather large arrangement anyway!

If you have very sensitive earphones (and sensitive ears!) and a good antenna, what may matter more than keeping the loss down to an absolute minimum is getting rid of interfering signals. A single-tuned circuit with 10kHz -3dB bandwidth offers only 20dB attenuation of a signal 50kHz away, and a signal 200kHz away is attenuated only about 32dB (assuming I didn't mess up my mental arithmetic). That's not a lot if you live in a metropolitan area with several stations nearby, and you want to hear the ones from far away. You can make the tuner with two or even three tuned circuits that are properly coupled, and get much better attenuation of those unwanted signals. But more tuned circuits means more loss in the tuner, too, even if you use high Q coils.

It's a really good idea to check out what others have done to advance the art of winding high Q coils for AM broadcast band frequencies, and of the circuits to use those coils to best advantage.

Cheers,
Tom

590. Re: Source for high-Q HF inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-28 00:57:53 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <IOCdnTo_6oYPyWvUnZ2dnUVZ_vSdnZ2d@web-ster.com>
Source record: 2893

Joerg wrote:
> Joel Koltner wrote:
>> Are there some vendors of readily available (stock) inductors that
>> have reasonably good Q's (>100) throughout the HF band?
>>
>> I'm familiar with something like the Coilcraft "maxi springs"
>> (http://coilcraft.com/maxi.cfm), and while they hit Q's of 100 by
>> 30MHz, I'd really like something that's already there by 3MHz or less
>> (...and still have a self-resonant frequency of >30MHz). This seems
>> quite doable simply by making a larger coil with thicker wire, I'd
>> just like to find a place that offers such inductors off-the-shelf
>> rather than having to wind my own. Inductance in the ballpark of
>> 1-10uH would be good, although it's not critical.
>>
>> The goal here is to try out making some adjustable notch filters for a
>> receiver (by switching L's and C's in and out, like antenna tuners
>> do). Hence, high Q is important, but power handling capability isn't
>> so much, and anything smaller than a breadbox is fine size-wise.
>>
>
> There isn't much of a market for this stuff anymore, at least not since
> the days of cloth-insulated wire :-)
>
> Since it's for a receiver, how about building a Q-multiplier? Ok, many
> youngster will scoff at that as being "archaic" but those things can
> really rock.
>
I second that motion (since I'm not doing the work...).

I had thought of suggesting it, I should have done so.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Do you need to implement control loops in software?
"Applied Control Theory for Embedded Systems" was written for you.
See details at http://www.wescottdesign.com/actfes/actfes.html

591. Re: Source for high-Q HF inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-28 01:14:41 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <6MsJl.15482$%54.12352@nlpi070.nbdc.sbc.com>
Source record: 2894

Tim Wescott wrote:
> Joerg wrote:
>> Joel Koltner wrote:
>>> Are there some vendors of readily available (stock) inductors that
>>> have reasonably good Q's (>100) throughout the HF band?
>>>
>>> I'm familiar with something like the Coilcraft "maxi springs"
>>> (http://coilcraft.com/maxi.cfm), and while they hit Q's of 100 by
>>> 30MHz, I'd really like something that's already there by 3MHz or less
>>> (...and still have a self-resonant frequency of >30MHz). This seems
>>> quite doable simply by making a larger coil with thicker wire, I'd
>>> just like to find a place that offers such inductors off-the-shelf
>>> rather than having to wind my own. Inductance in the ballpark of
>>> 1-10uH would be good, although it's not critical.
>>>
>>> The goal here is to try out making some adjustable notch filters for
>>> a receiver (by switching L's and C's in and out, like antenna tuners
>>> do). Hence, high Q is important, but power handling capability isn't
>>> so much, and anything smaller than a breadbox is fine size-wise.
>>>
>>
>> There isn't much of a market for this stuff anymore, at least not
>> since the days of cloth-insulated wire :-)
>>
>> Since it's for a receiver, how about building a Q-multiplier? Ok, many
>> youngster will scoff at that as being "archaic" but those things can
>> really rock.
>>
> I second that motion (since I'm not doing the work...).
>
> I had thought of suggesting it, I should have done so.
>

But now we gave away our age ;-)

--
Regards, Joerg

http://www.analogconsultants.com/

592. Re: Experimenting with Coils for Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-28 03:02:33 UTC
From: Bill M <radioexray@geeemail.com>
Message-ID: <gt5rkd01cuk@news1.newsguy.com>
Source record: 2895

K7ITM wrote:

>
> To put some numbers on what Paul suggested:
>
> If I want an unloaded coil Q of 2000 at 10MHz,

I stopped here.

I'd expect to need a....

No way you'll ever see 2000 Q at 10 Mcs. Can't happen. Some guys are approaching 2000 at 1 MC BCB but there's lots of expensive hoops to jump through to reach that point. Simply cannot be had at 10 Mcs. 200-300 on a good SW coil is about all that can be achieved.

> If you have very sensitive earphones (and sensitive ears!) and a good
> antenna, what may matter more than keeping the loss down to an
> absolute minimum is getting rid of interfering signals.

Thats Q.

=
> It's a really good idea to check out what others have done to advance
> the art of winding high Q coils for AM broadcast band frequencies, and
> of the circuits to use those coils to best advantage.

Indeed. But that agreed to there's no method to make the same numbers and techniques work at 10 Mcs. You really cannot achieve the numbers on SW as you can BCB given the 10x frequency difference.

593. Re: Experimenting with Coils for Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-28 05:59:14 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <cd6dv4dis13l91nrbtls4e3a3n9v8bffor@4ax.com>
Source record: 2896

On Mon, 27 Apr 2009 16:34:23 -0700 (PDT), K7ITM <k7itm@msn.com> wrote:

>If you have very sensitive earphones (and sensitive ears!) and a good
>antenna, what may matter more than keeping the loss down to an
>absolute minimum is getting rid of interfering signals. A single-
>tuned circuit with 10kHz -3dB bandwidth offers only 20dB attenuation
>of a signal 50kHz away, and a signal 200kHz away is attenuated only
>about 32dB (assuming I didn't mess up my mental arithmetic). That's
>not a lot if you live in a metropolitan area with several stations
>nearby, and you want to hear the ones from far away. You can make the
>tuner with two or even three tuned circuits that are properly coupled,
>and get much better attenuation of those unwanted signals. But more
>tuned circuits means more loss in the tuner, too, even if you use high
>Q coils.

Unless you live very near an international SW broadcasters, how do you expect to get any usable amplitude modulated signal in the middle of the SW band for your crystal set ?

To make the situation even worse, the power delivered by a matched dipole at 10 MHz is only 1/100 (-20 dB) of the power delivered by a matched dipole on 1 MHz due to the antenna capture area.

Paul OH3LWR

594. Re: Experimenting with Coils for Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-28 06:55:50 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <b2ce8e90-5924-4a9b-9dd4-95b079443ba3@j9g2000prh.googlegroups.com>
Source record: 2897

On Apr 27, 10:59 pm, Paul Keinanen <keina...@sci.fi> wrote:
> On Mon, 27 Apr 2009 16:34:23 -0700 (PDT), K7ITM <k7...@msn.com> wrote:
> >If you have very sensitive earphones (and sensitive ears!) and a good
> >antenna, what may matter more than keeping the loss down to an
> >absolute minimum is getting rid of interfering signals. A single-
> >tuned circuit with 10kHz -3dB bandwidth offers only 20dB attenuation
> >of a signal 50kHz away, and a signal 200kHz away is attenuated only
> >about 32dB (assuming I didn't mess up my mental arithmetic). That's
> >not a lot if you live in a metropolitan area with several stations
> >nearby, and you want to hear the ones from far away. You can make the
> >tuner with two or even three tuned circuits that are properly coupled,
> >and get much better attenuation of those unwanted signals. But more
> >tuned circuits means more loss in the tuner, too, even if you use high
> >Q coils.
>
> Unless you live very near an international SW broadcasters, how do you
> expect to get any usable amplitude modulated signal in the middle of
> the SW band for your crystal set ?
>
> To make the situation even worse, the power delivered by a matched
> dipole at 10 MHz is only 1/100 (-20 dB) of the power delivered by a
> matched dipole on 1 MHz due to the antenna capture area.
>
> Paul OH3LWR

Actually, I was thinking in the paragraph you quoted more of MW
broadcast, but since you mention SW: I have it on good authority that
European SW broadcasters put 7MHz signals into the East coast of the
US at levels up to close to 0dBm into a receiver's antenna terminals
when the skip is right. That's using an antenna with a bit of gain
over a dipole, but nothing fantastic. (That level gave me a goal for
strong-signal handling for an HF receiver I recently put into
production.)

Cheers,
Tom

595. Re: Experimenting with Coils for Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-28 07:18:20 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <27884c27-0037-4b50-8368-c83a80c8cf1a@p6g2000pre.googlegroups.com>
Source record: 2898

On Apr 27, 8:02 pm, Bill M <radioex...@geeemail.com> wrote:
> K7ITM wrote:
>
> > To put some numbers on what Paul suggested:
>
> > If I want an unloaded coil Q of 2000 at 10MHz,
>
> I stopped here.
>
> I'd expect to need a....
>
> No way you'll ever see 2000 Q at 10 Mcs. Can't happen. Some guys are
> approaching 2000 at 1 MC BCB but there's lots of expensive hoops to jump
> through to reach that point. Simply cannot be had at 10 Mcs. 200-300
> on a good SW coil is about all that can be achieved.
...
Interesting comment. In the filters I build for test fixtures, I use
air-core coils that are about 1" diameter and 1" long, and they give
me Qu in excess of 300 at 10MHz. For what I do, I don't need Qu up in
the thousands, and don't have room for really big coils, but can you
give me a reason I shouldn't expect Qu to scale linearly with size up
to the point where radiation losses become significant?

Can you tell me why I should think that the inductance calculator at
http://hamwaves.com/antennas/inductance.html is not giving me accurate
results when I put in, say, D=130mm, n=20, l=260mm, d=7mm, and
f=10MHz? It agrees with other independent ways I have to estimate the
Qu of the ~1 inch coils I build, and those coils measure within
engineering tolerance of the estimates.

When you go to very large coils like this, you have to be careful
about the self-resonance becoming too low, but in the example above,
it's (barely) OK at 10MHz. (Actually, you better be careful about the
self-resonance of any coil...) Fewer turns of larger diameter
"wire" (tubing: cheaper, and easier to work with) can yield about the
same Qu and a considerably higher self-resonance.

Cheers,
Tom

596. Re: Experimenting with Coils for Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-28 12:20:15 UTC
From: Bill M <radioexray@geeemail.com>
Message-ID: <gt6sa10uli@news5.newsguy.com>
Source record: 2899

K7ITM wrote:
> On Apr 27, 8:02 pm, Bill M <radioex...@geeemail.com> wrote:
>> K7ITM wrote:
>>
>>> To put some numbers on what Paul suggested:
>>> If I want an unloaded coil Q of 2000 at 10MHz,
>> I stopped here.
>>
>> I'd expect to need a....
>>
>> No way you'll ever see 2000 Q at 10 Mcs. Can't happen. Some guys are
>> approaching 2000 at 1 MC BCB but there's lots of expensive hoops to jump
>> through to reach that point. Simply cannot be had at 10 Mcs. 200-300
>> on a good SW coil is about all that can be achieved.
> ...
> Interesting comment. In the filters I build for test fixtures, I use
> air-core coils that are about 1" diameter and 1" long, and they give
> me Qu in excess of 300 at 10MHz. For what I do, I don't need Qu up in
> the thousands, and don't have room for really big coils, but can you
> give me a reason I shouldn't expect Qu to scale linearly with size up
> to the point where radiation losses become significant?
>
> Can you tell me why I should think that the inductance calculator at
> http://hamwaves.com/antennas/inductance.html is not giving me accurate
> results when I put in, say, D=130mm, n=20, l=260mm, d=7mm, and
> f=10MHz? It agrees with other independent ways I have to estimate the
> Qu of the ~1 inch coils I build, and those coils measure within
> engineering tolerance of the estimates.

Self-capacitance (ultimately self-resonance) is always a contributing
factor that prevents coils from achieving their maximum theoretical Q.
Estimating coils whose Q is going to fall in the 200 range for other
reasons is relatively easy but that doesn't mean you can scale upwards
proportionately.

I build air coils in the 3 inch range along the lines of what is
pictured here, http://www.sparkbench.com/homebrew/grebe/cr18.html

They only *measure* in the 250 range. Silver-plated wire could
certainly improve a coil of this size but no way would you achieve
numbers like 2000.

-Bill

597. Motorola transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-28 12:58:33 UTC
From: Herbert Breitenfellner <herb.breitenfellner@aon.at>
Message-ID: <49f6fd80$0$2295$91cee783@newsreader02.highway.telekom.at>
Source record: 2900

Hi All,
i am looking for a datasheet for a transistor in a TO 5 Case with a
Motorola logo on top.
Label: 1.line is SS3693
2.line is 836
May someone have an old Motorola databook or something like that and can
make a copy for me.

Thanks and vy73 de Herb oe5brl

598. Re: Motorola transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-28 14:00:36 UTC
From: Rick <ricknj10@hotmail.com>
Message-ID: <8_DJl.3276$b11.2719@nwrddc02.gnilink.net>
Source record: 2801

Hi Herb,

That number is "house number." Those numbers hide the commercial equivalent of that transistor. I doubt you will find any Motorola documentation giving you an equivalent. There may be some cross reference guide somewhere that some gracious soul assembled but I bet it will be without Motorolas blessing !
There is a very high probability that you can substitute any of hundreds of similar transistors and they will work, depending on the function of that transistor. If it was used for RF amplifier service you could try a 2N3866 or 2N5109, for example.

I used to work for Western Electric and the Bell System did something similar. We had "KS" parts. In most cases they were identical to commercial parts but we did quality sampling, life cycle testing, etc. on them and assured ourselves that we weren't getting scrap swept up off the floor. For this we marked up the price about ten fold (!!!) as we supplied these "approved" parts to our factories. The factories built things then that they expected to last 50 years. Motorola probably did the same. This also helped to keep repair technicians from substituting "commercial junk" into Motorola equipment and destroying their pristine reputation. But I digress......

Rick K2XT

599. Re: Motorola transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-28 15:09:10 UTC
From: alchazz <no.spam@wanted.com>
Message-ID: <q_EJI.3289$b11.2497@nwrddc02.gnilink.net>
Source record: 2802

On Tue, 28 Apr 2009 14:00:36 +0000, Rick wrote:

> Hi Herb,
>
> That number is "house number." Those numbers hide the commercial
> equivalent of that transistor. I doubt you will find any Motorola
> documentation giving you an equivalent. There may be some cross
> reference guide somewhere that some gracious soul assembled but I bet it
> will be without Motorolas blessing !
> There is a very high probability that you can substitute any of hundreds
> of similar transistors and they will work, depending on the function of
> that transistor. If it was used for RF amplifier service you could try
> a 2N3866 or 2N5109, for example.
>
> I used to work for Western Electric and the Bell System did something
> similar. We had "KS" parts. In most cases they were identical to
> commercial parts but we did quality sampling, life cycle testing, etc.
> on them and assured ourselves that we weren't getting scrap swept up off
> the floor. For this we marked up the price about ten fold (!!!) as we
> supplied these "approved" parts to our factories. The factories built
> things then that they expected to last 50 years. Motorola probably did
> the same. This also helped to keep repair technicians from substituting
> "commercial junk" into Motorola equipment and destroying their pristine
> reputation. But I digress......
>
> Rick K2XT

Hmm, I don't know if it is a house number. My 1987 D.A.T.A. Transistor
book goes up to only SS3638.

Al

600. Re: Motorola transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-28 15:44:04 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <5bd0cfb4-0642-4bd3-9f70-261151d92429@w35g2000prg.googlegroups.com>
Source record: 2803

On Apr 28, 8:58 am, Herbert Breitenfellner
<herb.breitenfell...@aon.at> wrote:
> Hi All,
> i am looking for a datasheet for a transistor in a TO 5 Case with a
> Motorola logo on top.
> Label: 1.line is SS3693
>   2.line is 836
> May someone have an old Motorola databook or something like that and can
> make a copy for me.
>
> Thanks and vy73 de Herb oe5brl

How was the transistor used, as much information you can give would be
helpful, frequency voltages power anything you can think of.

Jimmie

601. Re: Motorola transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-28 16:00:20 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <9852e3d5-26e4-4de2-a96c-83bee4370d43@l16g2000pra.googlegroups.com>
Source record: 2804

On Apr 28, 8:58 am, Herbert Breitenfellner
<herb.breitenfell...@aon.at> wrote:
> Hi All,
> i am looking for a datasheet for a transistor in a TO 5 Case with a
> Motorola logo on top.
> Label: 1.line is SS3693
>   2.line is 836
> May someone have an old Motorola databook or something like that and can
> make a copy for me.
>
> Thanks and vy73 de Herb oe5brl

Web sites that do part # to Federal stock # can be a big help in researching parts as they often include house numers and obsolete parts. Once you find FSN or NSN search for it by FSN and you may find replacement parts. I recently located a replacement this way. I would also try replacing the SS with 2n,2sc....ect and see what comes up. Check the specs of the transistors it list against the requirements of the circuit.

Good hunting.

Jimmie

602. Re: Motorola transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-28 16:17:41 UTC
From: Herbert Breitenfellner <herb.breitenfellner@aon.at>
Message-ID: <49f72c2c$0$2295$91cee783@newsreader01.highway.telekom.at>
Source record: 2805

JIMMIE schrieb:

> How was the transistor used, as much information you can give would be
> helpful, frequency voltages power anything you can think of.
>
> Jimmie

Hi,
the transistor is unused sitting in my junkbox and is waiting for
something to do. hi
I have got more of them. If i can't find any infos, then i will try to
build,for example, a Norton ampl. and compare it with one of my
favorites like 2N5109 But voltages and power are vitally to know.

73 Herb

603. Re: Experimenting with Coils for Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-29 04:35:33 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <qtkfv4ho0cff499kso382gkktm5j7icig6@4ax.com>
Source record: 2806

On Mon, 27 Apr 2009 16:34:23 -0700 (PDT), K7ITM <k7itm@msn.com> wrote:

>If I want an unloaded coil Q of 2000 at 10MHz, I'd expect to need a
>coil about 5 inches (13cm) diameter and 10 inches (26cm) long--or
>similar. That assumes no loss to radiation. If I shield it to make a
>helical resonator, the Q will actually be lowered slightly, though
>such a large coil may have enough loss to radiation that it would be a
>wash between turning it into a helical resonator or leaving it in free
>air. Of course, with the shielding, it's less susceptible to changes
>in the environment around it. Anyway, the shield for a helical
>resonator should be a couple times the diameter of the coil, so it's a
>rather large arrangement anyway!

1/4 wave filters used in repeater duplexers have quite high unloaded-Q and are available to at least down to 50 MHz. Of course these are long, but in order to reduce total shape, these might be bent into U-shape.

To go into even lower frequencies, the resonator can be bent into a helix. At least the design nomogram in old ARRL handbooks seem to indicate that with sufficient size very high unloaded-Q could be achieved (up to several thousands). Of course the helix itself and the inside of the resonator may have to be silver plated.

Paul OH3LWR

604. Re: Motorola transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-29 11:44:01 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <30413868-b582-4c86-8f2f-90a8b97839f5@v35g2000pro.googlegroups.com>
Source record: 2809

On Apr 28, 10:00 am, "Rick" <rickn...@hotmail.com> wrote:
> Hi Herb,
>
> That number is "house number." Those numbers hide the commercial equivalent
> of that transistor. I doubt you will find any Motorola documentation giving
> you an equivalent. There may be some cross reference guide somewhere that
> some gracious soul assembled but I bet it will be without Motorolas blessing
> !
> There is a very high probability that you can substitute any of hundreds of
> similar transistors and they will work, depending on the function of that
> transistor. If it was used for RF amplifier service you could try a 2N3866
> or 2N5109, for example.
>
> I used to work for Western Electric and the Bell System did something
> similar. We had "KS" parts. In most cases they were identical to
> commercial parts but we did quality sampling, life cycle testing, etc. on
> them and assured ourselves that we weren't getting scrap swept up off the
> floor. For this we marked up the price about ten fold (!!!) as we supplied
> these "approved" parts to our factories. The factories built things then
> that they expected to last 50 years. Motorola probably did the same. This
> also helped to keep repair technicians from substituting "commercial junk"
> into Motorola equipment and destroying their pristine reputation. But I
> digress......
>
> Rick K2XT

I dont think SS was a house number. I remember using some of the SS
transistors in my military days. If I am correct they were made in the
60s and are just long time obsolete.. The ones I remember were used in
a servo amp for a mag tape drive and were bad about going out. When
the drive would fail we almost immediately would change the SS
transistors as a first course of troubleshooting since they were very
easy to change(socketed) and usually the problem.

Here is a list of transistor prefixes SS was used on Motorola silicon
transistors:

Here is a list of semiconductor prefixes.

Pro electron A... (germanium)
Prefixes in the Datenblattsammlung:AA... AC... AD... AE... AF... AS...
OUTER ONE... AY...
of the manufacturers: AEG Telefunken, SIEMENS, Sescosem>sgs thomson,
VALVO>PHILIPS

Pro electron B... (silicon)
Prefixes in the data sheet collection:
BA.. BB.. BC.. BD.. BF. BG.. SHEET. BP. BREAK. BS.. BT.. LE. BX.. BY..
BZ..
of the manufacturers:
AEG Telefunken, INTERCMetal, MOTOROLA, RCA, SIEMENS, Sescosem>sgs
thomson, Texas Instruments, VALVO>PHILIPS
some also of BENTRON, FAIRCHILD, FERRANTI, GENERAL INSTRUMENT,
NATIONAL SEMICONDUCTOR, SAMSUNG, SILICONIX, SPRAGUE
and for opto-electronic parts (BP...) also of SILICONE GENERAL and
BENTRON
and for thyristors, triacs uww.(BT...) also of TRANSITRON

Pro electron C... (gallium arsenide)
Prefixes of the data sheet collection:
APPROX.... CF... CN... CQ... CX...
of the manufacturers: AEG Telefunken, SIEMENS, VALVO

JEDEC Registration

1N.... (diodes)
In the data sheet collection of:
FAIRCHILD, GENERAL ELECTRIC>RCA, GENERAL INSTRUMENT, MOTOROLA, RCA,
Sescosem>sgs thomson, SEMTECH, SOLITRON, Texas Instruments, UNITRODE
some also of CODI, GENERAL SEMICONDUCTOR, HEWLETT-PACKARD, M/ACOM,
MICROSEMICONDUCTOR CORP., SEMICON, SIEMENS, SILEC, TELEDYNE,
TRANSITRON, UNIZON, VALVO

2N.... (transistors)
All American manufacturers, also many European and Japanese. Before 30
years it belonged to the good clay/tone to have at least some JEDEC
types in the program. In the reason it unimportant also, from which
manufacturer the data sheet comes, because the uniformity was more
strictly supervised, as at most other families.

3N.... (FETs, opto coupler)
In the data sheet collection of:
GENERAL ELECTRIC>RCA, INTERSIL, MOTOROLA, RCA, SOLITRON, sprague,
TELEDYNE, Texas Instruments

4N.... (opto couplers)
In the data sheet collection of:
HEWLETT-PACKARD, MII=MICROPAC INDUSTRIES Inc., SIEMENS, Texas
Instruments, ENGINE

Ñ.... (opto couplers)
In the data sheet collection of:
HEWLETT-PACKARD, MII=MICROPAC INDUSTRIES Inc..

Japanese type rows

1S.... (diodes)
In the data sheet collection of:
MATSUSHITA, MITSUBISHI, NEC, NJRC, ROHM, SANYO, SONY, TOSHIBA

2SA.... (PNP)
2SB.... (PNP, power)
2SC.... (NPN and NPN HF power)
2SD.... (NPN, power)
In the data sheet collection of: FUJITSU, HITACHI, MATSUSHITA,
MITSUBISHI, NEC, ROHM, SAMSUNG, SANK, SANYO, SONY, TOSHIBA

2SJ.... (P channel FET)
In the data sheet collection of HITACHI, NEC, SONY, TOSHIBA

2SK.... (N channel FET)
In the data sheet collection of HITACHI, MATSUSHITA, MITSUBISHI, NEC,
ROHM, SONY, TOSHIBA

3SK.... (N channel DGMOSFET)
In the data sheet collection of NEC and SONY

Pre manufacturer fixed
G GENERAL INSTRUMENT>GENERAL SEMICONDUCTOR (diode) Thomson csf>st
MICROELECTRONICS
GAT PLESSEY>GEC PLESSEY SEMICONDUCTORS GIGAHERTZ DEVICE (varactor)
GD SIEMENS>INFINEON
GE HARRIS>INTERSIL (Ts, diodes)
GED GENERAL ELECTRIC>HARRIS>INTERSIL(FET)
GEG RCA>HARRIS>INTERSIL (FET)
GOES RCA>HARRIS>INTERSIL (FET)
GEP RCA>HARRIS>INTERSIL (FET)
GER RCA>HARRIS>INTERSIL (FET) GI GENERAL INSTRUMENT>GENERAL
SEMICONDUCTOR (diode)
GHV GENERAL SEMICONDUCTOR IND.INC.(Suppressor)
GLA of CODI=COMPUTER DIODE CORP.(Diode)
GSI HARRIS>INTERSIL (IGBT)
GSV GENERAL SEMICONDUCTOR IND.INC.
GT TOSHIBA (IGBT)
hp FERRANTI>GEC PLESSEY SEMICONDUCTORS (diode)
HFET HEWLETT PACKARD (ATM F T)
HGTA HARRIS>INTERSIL (IGBT)
HGTB HARRIS>INTERSIL (IGBT)
HGTD HARRIS>INTERSIL (IGBT)
HGTG HARRIS>INTERSIL (IGBT)
HGTH HARRIS>INTERSIL (IGBT)
HGTM HARRIS>INTERSIL (IGBT)
HGTP HARRIS>INTERSIL (IGBT)
HMF HARRIS>INTERSIL MICROWAVE SEMICOND.
HPWR HEWLETT PACKARD (MOSFET)
HT FERRANTI>GEC PLESSEY SEMICONDUCTORS (Ts)
HV ERIE (diode)
HVF UNITRODE (diode)
HVU HITACHI (C-diode)
ICT GENERAL SEMICONDUCTOR IND.INC.(Transzorb)
ICTE GENERAL SEMICONDUCTOR IND.INC.(Transzorb)
ID INTERSIL>HARRIS>INTERSIL (diode)

IGT HARRIS>INTERSIL (IGBT)
IMB ROHM (Ts)
IMD ROHM (Ts)
IMH ROHM (Ts)
IMT ROHM (Ts)
IMX ROHM (Ts)
IMZ ROHM (Ts)
IRF INTERNATIONAL of RECTIFIER (MOSFET)
IRFAC RCA>HARRIS>INTERSIL (MOSFET)
IRFBC RCA>HARRIS>INTERSIL (MOSFET)
IRFD INTERNATIONAL of RECTIFIER (MOSFET)
IRFF INTERNATIONAL of RECTIFIER (MOSFET)
IRFG INTERNATIONAL of RECTIFIER (MOSFET
IRFH INTERNATIONAL of RECTIFIER (MOSFET)
IRFJ INTERNATIONAL of RECTIFIER (MOSFET)
IRFP INTERNATIONAL of RECTIFIER (MOSFET)
IRFPC RCA>HARRIS>INTERSIL (MOSFET)
IRFR HARRIS>INTERSIL (MOSFET)
IRFU HARRIS>INTERSIL (MOSFETS)
IRFZ INTERNATIONAL of RECTIFIER (MOSFET)
IT INTERSIL>HARRIS>INTERSIL (MOSFET)
IVN INTERSIL>HARRIS>INTERSIL (MOSFET)
IXTH IXYS (MOSFET)
IXTM IXYS (MOSFET)
J SILICONIX (FET)
JO ENGINE SEMICONDUCTORS>MOTOROLA (Ts)
JPAD CALOGIC CORP. (diode)
K KMC SEMICONDUCTOR COR: (Ts) TELEFUNKEN>TEMIC (opto coupler), SGS>ST
MICROELECTRONICS (Ts)
KB UNIZON (diode)
KE SOLITRON (FET)
KSC SAMSUNG(discrete)>FAIRCHILD SEMICONDUCTOR (Ts)
KSD SAMSUNG(discrete)>FAIRCHILD SEMICONDUCTOR (Ts)
KTY VALVO>PHILIPS (temp sensor)
KV TOKO SEMICONDUCTORS (C-diode)
LD of CODI=COMUTER DIODE CORP.(Diode)
LL INTERMETALL>GENERAL SEMICONDUCTOR (diode)
LNA of CODI=COMPUTER DIODE CORP.(Diode)
LT ENGINE SEMICONDUCTORS>MOTOROLA (Ts)
LVA ENGINE SEMICONDUCTORS>MOTOROLA (diode)
M SEMTECH (diode) SILICONIX (FET) INTERSIL>HARRIS>INTERSIL (FET) mA
MICROWAVE ASSOCIATES=MACOM/AMP(Ts, Dioden) MOTOROLA (germanium)
MAC MOTOROLA (triac)
MT GENERAL INSTRUMENT>GENERAL SEMICONDUCTOR (Rect.)
MSC=MICROSEMICONDUCTOR CORP.(Diode)
MBD MOTOROLA (diode)
MBR MOTOROLA (diode) GENERAL INSTRUMENT>GENERAL SEMICONDUCTOR (diode)
MC MOTOROLA (IC)
MSC=MICROSEMICONDUCTOR CORP.(Diode)
MCL MOTOROLA (diode) MCR MOTOROLA (Thyr.usw.)

MCT GENERAL INSTRUMENT>GENERAL SEMICONDUCTORS (Optok.) MCTA
HARRIS>INTERSIL (MOS Thyr.)
MCTV HARRIS>INTERSIL (MOS Thyr.)
MD MOTOROLA (Ts)
MDA MOTOROLA (Rect.)
ME Thomson csf>st MICROELECTRONICS (diode)
MEM SILICONIX (MOSFET)
MFE MOTOROLA (FET)
MFR MOTOROLA (Ts)
mg TOSHIBA (IGBT)
MGF MITSUBISHI (ATM F T)
MH MSC=MICROSEMICONDUCTOR CORP.(Diode)
MI MITSUBISHI (diode)
MJ MOTOROLA (Ts)
MFE MOTOROLA (Ts)
ML PLESSEY>GEC PLESSEY SEMICONDUCTORS (Ts)
mm MOTOROLA (Ts)
MMBD MOTOROLA (diode)
MMBV MOTOROLA (diode)
MMCM MOTOROLA (Ts)
MMD MOTOROLA (diode)
MMT MOTOROLA (Ts)
MP MICRO POWER of SYSTEM (Ts) MOTOROLA (Ts)
MPC MOTOROLA (SMART)
MPF SILICONIX (FET) MOTOROLA (FET)
MPG GENERAL INSTRUMENT>GENERAL SEMICONDUCTOR (diode)
MPN MOTOROLA (diode)
MPS MOTOROLA (Ts) FAIRCHILD (Ts)
MPSA FAIRCHILD (Ts) MOTOROLA (Ts) FERRANTI>GEC PLESSEY SEMICONDUCTORS
(Ts)
MPSD MOTOROLA (Ts) MPSH FAIRCHILD (Ts)
MPSL FAIRCHILD (Ts) MPSU MOTOROLA (Ts)
MPT MOTOROLA (Bilat.Trig.)
MPU MOTOROLA (UJTs)
MR MOTOROLA (diode)
MRA ENGINE SEMICONDUCTORS>MOTOROLA (Ts)
MRF MOTOROLA (Ts)
MSC MSC=MICROWAVE SEMICOND.CORP.>SIEMENS?(Ts)
MSD MOTOROLA (diodes)
MT MICROSEMICONDUCTOR CORP. (diode) PLESSEY>GEC PLESSEY SEMICONDUCTORS
(FET)
MTM MOTOROLA (MOSFET)
MTP MOTOROLA (MOSFET) Sgs thomson>st MICROELECTRONICS (MOSFET)
MTS MOTOROLA (temp sensor)
MU MOTOROLA (diodes)
MUR RCA>HARRIS>INTERSIL(Dioden)
mV MOTOROLA (C-diode)
MVAM MOTOROLA (C-diode)
MZ MOTOROLA (breakdown diode) SILEC (diode)
WELL NSC=NATIONAL SEMICONDUCTOR CORP.(Ts)

NB NSC=NATIONAL SEMICONDUCTOR CORP.(Ts)
lp SILICONIX (MOSFET)
NE NEC (Ts)
NR NSC=NATIONAL SEMICONDUCTOR CORP.(Ts)
LV SOLITRON (diode)
NOS SILICONIX (MOSFET)
OA VALVO>PHILIPS (diode) degrees VALVO>PHILIPS (Ts)
INTERMETALL>GENERAL SEMICONDUCTOR (Ts) TELEFUNKEN (Ts)
OCP VALVO>PHILIPS (Ge photo Ts)
OD TELEFUNKEN (Ts)
ON VALVO>PHILIPS (Ts)
OI OPTRON (Opto)
OY AEG (diode)
P Siliconix (Ts) PLESSEY>GEC PLESSEY SEMICONDUCTORS (ATM F T) P6KE Sgs
thomson>st MICROELECTRONICS (Suppressor)
P7T Sgs thomson>st MICROELECTRONICS (Suppressor)
PAD SILICONIX (diode) CALOGIC CORP. (diode)
PBYR PHILIPS'S (diode) PE FAIRCHILD (Ts)
PFR Sgs thomson>st MICROELECTRONICS (diode)
PG AMPOWER (diode)
pH MACOM=AMP (Ts) VALVO>PHILIPS (Ts)
PL Sgs thomson>st MICROELECTRONICS (Suppressor) Texas Instruments
(Ts)
POLARIZES Sgs thomson>st MICROELECTRONICS (diode)
PMBF VALVO>PHILIPS (FET)
PMD LAMBDA (Ts)
pn FAIRCHILD (Ts)
PRD of CODI=COMPUTER DIODE CORP. (diode)
HP of ENGINES SEMICONDUCTORS>MOTOROLA(Diode)
PT ENGINE SEMICONDUCTORS>MOTOROLA(Ts)
PTB ERICSSON (Ts)
PTC off = all bradly (Ts)
PZT VALVO>PHILIPS (Ts)
QSCH HEWLETT PACKARD (diode)
RB TOSHIBA? (diode)
RCH HARRIS>INTERSIL (IGBT)
RDF GENERAL INSTRUMENT>GENERAL SEMICONDUCTOR (Rect.)
RF EDI (diode) RFA HARRIS>INTERSIL (MOSFET)
RFW HARRIS>INTERSIL (MOSFET)
RK EDI (diode)
RMPG GENERAL INSTRUMENT>GENERAL SEMICONDUCTOR (diode)
RN TOSHIBA (Ts)
RTC TRANSITRON (Thyr.)
RTD TRANSITRON (Thyr)
RTGD TRANSITRON (GTO Thyr)
RTPC TRANSITRON (Opto Thyr.)
RTU TRANSITRON (SCR)
RUR HARRIS>INTERSIL (diode)
RURD HARRIS>INTERSIL (diode)
S SHINDENGEN (diode) SEMICON (diode) INTERMETALL>GENERAL SEMICONDUCTOR

(diode)
CTC=COMMUNICATIONS TRANSISTOR CORP. (Ts) AEG Telefunken (diode)
TOSHIBA (Ts) POWEREX (Thyr.) Texas Instruments (GaSaFET) SEMICON
(Suppressor) SELF-service GENERAL INSTRUMENT>GENERAL SEMICONDUCTOR
(diode) SANYO (diode)
SBL GENERAL INSTRUMENT>GENERAL SEMICONDUCTOR (diode) sports club
GENERAL ELECTRIC>HARRIS>INTERSIL(Triac) MOTOROLA (triac) SCA SEMTECH
(diode)
SCHF SEMTECH (diode)
SCHS SEMTECH (diode)
SCM SEMTECH (diode)
SCT SEMTECH (diode)
SD Sgs thomson>st MICROELECTRONICS (Ts) CALOGIC CORP.(CMOS) SOLITRON
(diode) INTERMETALL>GENERAL SEMICONDUCTOR (diode) TOPAZ (MOSFET)
UNITRODE (diode) SILICONE GENERAL (diode) SPI=SEMI PROCESSES Inc.
(MOSFET)
SDF SOLITRON (FET) SDM SOLITRON (Ts)
SDT SOLITRON (Ts) SES UNITRODE (diode)
SFH SIEMENS>INFINEON (photo...)
SFT DITRATHERM (Ts)
SGH SONY (HEMT)
SGM SONY (ATM F T)
SGS Sgs thomson>st MICROELECTRONICS (diodes) SGSD Sgs thomson>st
MICROELECTRONICS (Ts)
SGSP Sgs thomson>st MICROELECTRONICS (MOSFET)
SGT RCA>HARRIS>INTERSIL (Suppressor)
SI SIEMENS>INFINEON (diode)
SICT SEMICON (diode)
SID AEG (diode)
SIL INTERMETALL>GENERAL SEMICONDUCTOR (breakdown diode)
SKC SEMIKRON (Ts)
SM Sgs thomson>st MICROELECTRONICS (diode)
SMBT SIEMENS>INFINEON (Ts)
SMBYT Sgs thomson>st MICROELECTRONICS (diode)
SMD SILICONIX (Ts) SMF SOLITRON (FET)
SMM SILICONIX (MOSFET)
SMU SILICONIX (Ts)
SN SIEMENS>INFINEON (MOSFET)
FR SIEMENS>INFINEON (MOSFET) Sgs thomson>st MICROELECTRONICS (Ts)
SPD SOLITRON (diode)
SQ MSI (C-diode)
SRP GENERAL INSTRUMENT>GENERAL SEMICONDUCTOR (diode)
SS MOTOROLA (Ts)
SSiE SIEMENS>INFINEON (diode)
SST SILICONIX (FET) CALOGIC CORP. (FET)
STH Sgs thomson>st MICROELECTRONICS (IGBT)
STL Sgs thomson>st MICROELECTRONICS (MOSFET)
STV Sgs thomson>st MICROELECTRONICS (MOSFET)
CSU INTERSIL>HARRIS>INTERSIL (FET)
SUES SEMICON (diode) SONY? (diode)

SVD ENGINE SEMICONDUCTORS>MOTOROLA (diode)
SVT ENGINE SEMICONDUCTORS>MOTOROLA (Ts)
SX SEMTECH (breakdown diode) SYSTEM SEMTECH (breakdown diode)
sp MOTOROLA (breakdown diode)
T AEG (Thyr.) RCA>HARRIS>INTERSIL (Thyr.)
TBC THOSHIBA (Ts)
TC TRANSITRON (THYR.) Thomson csf>sgs thomson>st MICROELECTRONICS (ATM
F T)
TCC Sgs thomson>st MICROELECTRONICS (Ts)
TCR TRANSITRON (Thyr.)
TCDT TELEFUNKEN (Optok.)
TD SILICONIX (MOSFET) AEG (Thyr.)
TDS Sgs thomson>st MICROELECTRONICS (Ts) TELEFUNKEN>TEMIC (Ts)
TEC TOSHIBA (Ts)
TED TOSHIBA (Ts)
TF SIEMENS>INFINEON (Ts)
TFR TRANSITRON (diode)
TGL GENERAL INSTRUMENT>GENERAL SEMICONDUCTOR (diode)
TH Sgs thomson>st MICROELECTRONICS (Ts)
THS TOSHIBA? (resounding sensor)
TI of Texas Instruments (Ts)
TIP Texas Instruments (Ts) SAMSUNG(discrete)>FAIRCHILD SEMICONDUCTOR
Sgs thomson>st MICROELECTRONICS
TIS Texas Instruments (Ts)
t-lva Sgs thomson>st MICROELECTRONICS (breakdown diode)
TM TRANSITRON (diode) Sgs thomson>st MICROELECTRONICS (breakdown
diode) TMF TELMOS (MOSFET)
TMM Sgs thomson>st MICROELECTRONICS (diode)
TN SILICONIX (MOSFET) SUPERTEX (MOSFET)
TP SUPERTEX (MOSFET) SIEMENS>INFINEON (photo.) ENGINES
SEMICONDUCTORS>MOTOROLA (Ts)
TPA Sgs thomson>st MICROELECTRONICS (Suppressor)
TPB Sgs thomson>st MICROELECTRONICS (Suppressor)
TPM ENGINE SEMICONDUCTORS>MOTOROLA (Ts)
TPV ENGINE SEMICONDUCTORS>MOTOROLA (Ts) ENGINE ENGINE
SEMICONDUCTORS>MOTOROLA (Ts)
TSF Texas Instruments (Temp.Sens.)
TSU Texas Instruments (Temp.Sens.)
TTB ERICSSON (Ts)
t-tip TECCOR ELECTRONICS Inc. (Ts)
DO SIEMENS>INFINEON (Tunneld.)
TVS UNITRODE (diode) powerplant AEG (diode)
TX SONY (MOSFET) HEWLETT-PACKARD (diode)
TXC SIEMENS>INFINEON (triac)
TXD SIEMENS>INFINEON (triac)
TZ TOPAZ (MOSFET) SEMICON (Z/Suppressor)
U SILICONIX (FET) INTERSIL>HARRIS>INTERSIL (FET) VALVO>PHILIPS (FET)
U2TA UNITRODE (Ts)
UC SOLITRON (FET)
UES UNITRODE (diode)

UF MACOM (Ts) GENERAL INSTRUMENT>GENERAL SEMICONDUCTOR (diode)
UFN UNITRODE (MOSFET)
UFNA UNITRODE (MOSFET)
UFND UNITRODE (MOSFET)
UFNF UNITRODE (MOSFET)
UHVP UNITRODE (diode) AROUND UNITRODE (diode)
UMT UNITRODE (Ts)
UPT UNITRODE (Ts)
UN MATSUSHITA (Ts)
UPP MICROSEMI CORP. (diode)
USD UNITRODE (diode)
USR SIEMENS>INFINEON (diode)
UT UNITRODE (diode)
UTR UNITRODE (diode)
UTV ACRIAN (Ts)
UTX UNITRODE (diode)
UZ UNITRODE (breakdown diode)
V TELEFUNKEN>TEMIC (Opto)
VCR SILICONIX (FET)
VMP SILICONIX (MOSFET)
VN SUPERTEX (MOSFET) INTERSIL>HARRIS>INTERSIL (MOSFET) SILICONIX
(MOSFET) TOPAZ (MOSFET)
VP TOPAZ (MOSFET) SUPERTEX (MOSFET)
VSK VARO SEMICONDUCTOR INC.(Diode)
WN SILICONIX (FET)
CR JRC=JAPAN RADIO CORP.(Z Diode)
YTS TOSHIBA (Ts)
Z INTERMETALL>GENERAL SEMICONDUCTOR (breakdown diode)
ZC FERRANTI>GEC PLESSEY SEMICONDUCTORS (diode)
ZD INTERMETALL>GENERAL SEMICONDUCTOR (breakdown diode)
ZF INTERMETALL>GENERAL SEMICONDUCTOR (breakdown diode)
ZL INTERMETALL>GENERAL SEMICONDUCTOR (breakdown diode)
ZM INTERMETALL>GENERAL SEMICONDUCTOR (breakdown diode)
ZPD INTERMETALL>GENERAL SEMICONDUCTOR (breakdown diode)
ZPU INTERMETALL>GENERAL SEMICONDUCTOR (breakdown diode)
ZTX FERRANTI>GEC PLESSEY SEMICONDUCTORS (Ts)
ZPY INTERMETALL>GENERAL SEMICONDUCTOR (breakdown diode)
ZSY INTERMETALL>GENERAL SEMICONDUCTOR (Suppressor)
ZTE INTERMETALL>GENERAL SEMICONDUCTOR (breakdown diode)
ZVN FERRANTI>GEC PLESSEY SEMICONDUCTORS (MOSFET)
ZX INTERMETALL>GENERAL SEMICONDUCTOR (breakdown diode)
ZY INTERMETALL>GENERAL SEMICONDUCTOR (breakdown diode)
ZZ INTERMETALL>GENERAL SEMICONDUCTOR (Suppressor)

JImmie

605. interchangeable coils etc: new ideas for connectors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-29 17:52:37 UTC
From: spamhog <n1jpr@hotmail.com>
Message-ID: <61c894eb-4b55-4c3b-9451-e670ca139f6a@a5g2000pre.googlegroups.com>
Source record: 2807

IDEA

Many things are much simpler to make if switching RF components is avoided.

Historically, the most common connection type used for interchangeable coils seems to have been the octal socket and plug. The practical cons of this and similar solution are availability, lead length, and 1:1 tank-circuit to plug ratio.

OBSERVATION

When I look at the long gold-plated multi-contact plug-in connections on a PCI bus et similia, I see several advantages:

- many connections to play with, often used for large bandwidth signals

- connections spread along one dimension, hence plugging more than one RF-separate group of components on one card in one gesture seems conceivable

- one board extends at 90deg from the other, adding useful real estate within a small radius (cautions apply...)

- the plug-in board can itself hold structures with a vertical component, such as small shielding enclosures

- multiple contacts can be used for grounding, effectively helping keeping multiple component groups well separated, and also for other low impedance connections

- last, but not trivial, a card could have some free flat space opposite the contact edge for grabbing and pushing without touching and stressing the components themselves.

COMMENTS

In practice, I want to resuscitate a rough avatar of the HRO "tuning drawers" of the 1930's.

As an example, I am designing a bi-directional triple-tuned circuit around a triple variable capacitor, for use as a full coverage preselector/output filter - potentially from LF to HF.

It would be nice to put three combinations of coils and capacitive trimmers on a single card and stick it in to change bands. If that were possible, it would be trivial to design some cards for broad tuned coverage, others for a narrower band or even non-tuneable for a single frequency - not using the variable capacitor.

As a matter of course, different LPF's could be swapped in the same way.

This would be less convenient than switching, but would also obviate the need of wafer switches, switching diodes, reed relays &c. &c. and potentially introduce scope-oriented, not just frequency-oriented modular flexibility.

If I could find blank two-face copper clad PCI cards in a few different sizes I'd surely know how to put them to good use!

QUESTIONS:

- I don't recall seeing examples of this, including components or groups of components that are
. * multiple
. * functionally separate
. * RF-segregated
. * RF-hot at the same time
. * at successive stages on a signal path
. * on a single plug-in card.

Other than the HRO drawers, are there any?

- Any suggestions for card and socket formats that are
. * standardized
. * widely available
. * perf board or single / double copper clad
. * blank or with minimal preset paths / swathes
. * ...or just the gilt contact edge, on which a board could be bolted/glued?

I hope I have indeed missed the classic elephant in the courtyard, and that a solution is at hand at www dot whatanewbie dot com.... ;-)

Thanks in eager anticipation!

Filippo N1JPR / I2

606. Frequency doubling: Is bandpass filtering needed?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-29 23:25:57 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <am5Kl.287309$rp7.257557@en-nntp-02.dc1.easynews.com>
Source record: 2808

I'm making a quick and dirty frequency "octupler" (x8) that uses a string of three Mini-Circuits frequency doublers (AMK-2-13+, KC2-11+, KC2-19+) -- 300-312.5MHz in, 2400-2500MHz output (the ISM band). I believe these are just diode ring-based mixers hooked up and optimized to act as doublers; they have an insertion loss of around 11dB. I have buffer amplifiers at the output of each to make up for this loss, but I'm wondering... do I need to bother with bandpass filters as well? Without them each doubler suppresses the fundamental and 3rd harmonic by some 40-60dB (depends on input frequency); the 4th harmonic is suppressed by ~15dB. Is anything undesireable going to happen if I just let everything through? That would mean that at the final (x8) output, I'd still have plenty of lower frequencies around -- albeit pretty well suppressed -- as well as some x12, x16, etc... but the x8 component should still be the strongest by far.

For a diode ring-based mixer, it's not entirely clear to me whether or not having some low-level "junk" to the RF input is all that bad. As a man once said to me, "diode mixer RF ports like being driven by squares waves," so the higher harmonics don't seem as though they'd matter much... but will the lower-frequency signals tending to dither the exact turn-on point of the diodes be deleterious?

---Joel

607. Re: Frequency doubling: Is bandpass filtering needed?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-30 01:09:56 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <IT6Kl.20051$as4.15894@nlpi069.nbdc.sbc.com>
Source record: 2810

Joel Koltner wrote:
> I'm making a quick and dirty frequency "octupler" (x8) that uses a string of
> three Mini-Circuits frequency doublers (AMK-2-13+, KC2-11+, KC2-19+) --
> 300-312.5MHz in, 2400-2500MHz output (the ISM band). I believe these are just
> diode ring-based mixers hooked up and optimized to act as doublers; they have
> an insertion loss of around 11dB. I have buffer amplifiers at the output of
> each to make up for this loss, but I'm wondering... do I need to bother with
> bandpass filters as well? Without them each doubler suppresses the
> fundamental and 3rd harmonic by some 40-60dB (depends on input frequency); the
> 4th harmonic is suppressed by ~15dB. Is anything undesireable going to happen
> if I just let everything through? That would mean that at the final (x8)
> output, I'd still have plenty of lower frequencies around -- albeit pretty
> well suppressed -- as well as some x12, x16, etc... but the x8 component
> should still be the strongest by far.
>
> For a diode ring-based mixer, it's not entirely clear to me whether or not
> having some low-level "junk" to the RF input is all that bad. As a man once
> said to me, "diode mixer RF ports like being driven by squares waves," so the
> higher harmonics don't seem as though they'd matter much... but will the
> lower-frequency signals tending to dither the exact turn-on point of the
> diodes be deleterious?
>

Yes, anything below the desired 8x frequency and anything above that
isn't a harmonic of it will cause spurious mixing products when your
intent is to drive the LO port of a DBM with it. What happens within
your octupler doesn't matter much as long as you filter the final output.

BTW, in the olden days we preferred 3x, 5x per stage. Two 3x stages
would give you 9x. The most brazen ones (not me) did a direct 7x or even
9x. We just drove transistors in class C real hard.

--
Regards, Joerg

http://www.analogconsultants.com/

608. Re: Experimenting with Coils for Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-30 01:20:21 UTC
From: David <DavidBR549@gmail.com>
Message-ID: <c6b3c1e0-3f16-4dd6-bcbf-b5d7dd741a05@f41g2000pra.googlegroups.com>
Source record: 2811

On Apr 25, 7:23 pm, David <DavidBR...@gmail.com> wrote:
> Was just wandering if anyone has used or experimented with television
> IF, Video and Detector coils, most are slug tuned coils that have a
> few uh to several hundred uh, some are sheilded some are not, i have
> about 500 that i bought years ago, a lot of them look very close too
> the old loopstick type coils, looking for
> ideas.
> Thanks David

Wonder if an adjustable coil loopstick and variable capacitor
preselector between the antenna and the crystal set would improve
reception for distant stations on the broadcast and high frequency
bands? David

609. Re: Experimenting with Coils for Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-30 03:18:15 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <Y-qdnRfEh_vhhWTUnZ2dnUVZ_hRi4p2d@web-ster.com>
Source record: 2812

David wrote:
> On Apr 25, 7:23 pm, David <DavidBR...@gmail.com> wrote:
>> Was just wandering if anyone has used or experimented with television
>> IF, Video and Detector coils, most are slug tuned coils that have a
>> few uh to several hundred uh, some are sheilded some are not, i have
>> about 500 that i bought years ago, a lot of them look very close too
>> the old loopstick type coils, looking for
>> ideas.
>> Thanks David
>
> Wonder if an adjustable coil loopstick and variable capacitor
> preselector between the antenna and the crystal set would improve
> reception for distant stations on the broadcast and high frequency
> bands? David

Nope, you have the same problem with loaded vs. unloaded Q and efficiency.

You can get there from here, you just can't do it with that loopstick.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

Do you need to implement control loops in software?
"Applied Control Theory for Embedded Systems" was written for you.
See details at http://www.wescottdesign.com/actfes/actfes.html

610. Re: Experimenting with Coils for Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-30 04:43:27 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <577bca64-c74f-4419-9781-23681fa8a95d@a5g2000pre.googlegroups.com>
Source record: 2813

On Apr 28, 5:20 am, Bill M <radioex...@geeemail.com> wrote:
> K7ITM wrote:
> > On Apr 27, 8:02 pm, Bill M <radioex...@geeemail.com> wrote:
> >> K7ITM wrote:
>
> >>> To put some numbers on what Paul suggested:
> >>> If I want an unloaded coil Q of 2000 at 10MHz,
> >> I stopped here.
>
> >> I'd expect to need a....
>
> >> No way you'll ever see 2000 Q at 10 Mcs. Can't happen. Some guys are
> >> approaching 2000 at 1 MC BCB but there's lots of expensive hoops to jump
> >> through to reach that point. Simply cannot be had at 10 Mcs. 200-300
> >> on a good SW coil is about all that can be achieved.
> > ...
> > Interesting comment. In the filters I build for test fixtures, I use
> > air-core coils that are about 1" diameter and 1" long, and they give
> > me Qu in excess of 300 at 10MHz. For what I do, I don't need Qu up in
> > the thousands, and don't have room for really big coils, but can you
> > give me a reason I shouldn't expect Qu to scale linearly with size up
> > to the point where radiation losses become significant?
>
> > Can you tell me why I should think that the inductance calculator at
> >http://hamwaves.com/antennas/inductance.htmlis not giving me accurate
> > results when I put in, say, D=130mm, n=20, l=260mm, d=7mm, and
> > f=10MHz? It agrees with other independent ways I have to estimate the
> > Qu of the ~1 inch coils I build, and those coils measure within
> > engineering tolerance of the estimates.
>
> Self-capacitance (ultimately self-resonance) is always a contributing
> factor that prevents coils from achieving their maximum theoretical Q.
> Estimating coils whose Q is going to fall in the 200 range for other
> reasons is relatively easy but that doesn't mean you can scale upwards
> proportionately.
>
> I build air coils in the 3 inch range along the lines of what is
> pictured here, http://www.sparkbench.com/homebrew/grebe/cr18.html
>
> They only *measure* in the 250 range. Silver-plated wire could
> certainly improve a coil of this size but no way would you achieve
> numbers like 2000.
>
> -Bill

OK, I was curious. Was I way off-base, or is it reasonable to think that you can get a 10MHz Qu considerably higher than 250 (and possibly up in the stratosphere above 1000)? I'm not going to spend the time, effort and money to build a seriously large coil as the theory suggests I'd need, but I did wind a somewhat smaller one...

I wound 15 turns of #10 AWG (2.55mm) bare copper with about 2.25 inches ID and 3 inches long. I resonated it with 3 * 12pF C0G capacitors; it resonates at 9.088MHz. I coupled an output to an analyzer through 1pF tapped one turn up from the "cold" end, and loosely coupled an input from the analyzer's source using a one-turn loop spaced away from the coil. My back-of-the-envelope calculation says such a coil with air insulation should have a Qu around 740 at 9MHz. In a tank circuit, the finite Q of the capacitors will lower the tank Q below that value. What I actually measure is a 3dB bandwidth of 15.87kHz, for a tank Q of 572. OK, so that's a bit lower than I might have expected. BUT--this coil is wound on a length of black ABS drain pipe, which is an absolutely terrible thing to use as a coil form if you're trying to get the highest possible Q. (My plan was originally to take the coil off the form after I wound it, but it had too much of a mind of its own about what shape it was going to assume. I've wound some smaller self-supporting coils, but this one didn't work that way.)

I'm convinced by this little 'speriment that I could build an LC tank resonant at 10MHz with a tank Q above 1000 with no trouble--and probably _well_ above 1000 if I used really high Q capacitors and just enough low-loss solid insulation to keep the coil turns properly spaced. I don't need one at the moment, but if I ever do, I sure won't be afraid to try it.

Cheers,
Tom

611. Re: Motorola transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-30 04:56:51 UTC
From: JB <nospam@goofball.net>
Message-ID: <ncaKl.1466$fy.1356@nwrddc01.gnilink.net>
Source record: 2814

"Herbert Breitenfellner" <herb.breitenfellner@aon.at> wrote in message
news:49f72c2c$0$2295$91cee783@newsreader01.highway.telekom.at...
> JIMMIE schrieb:
>
> > How was the transistor used, as much information you can give would be
> > helpful, frequency voltages power anything you can think of.
> >
> > Jimmie
>
> Hi,
> the transistor is unused sitting in my junkbox and is waiting for
> something to do. hi
> I have got more of them. If i can't find any infos, then i will try to
> build,for example, a Norton ampl. and compare it with one of my
> favorites like 2N5109 But voltages and power are vitally to know.
>
> 73 Herb

Gee! just save it for show.

612. Re: Motorola transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-30 09:36:53 UTC
From: Herbert Breitenfellner <herb.breitenfellner@aon.at>
Message-ID: <49f9713d$0$2297$91cee783@newsreader01.highway.telekom.at>
Source record: 2815

JB schrieb:
> "Herbert Breitenfellner" <herb.breitenfellner@aon.at> wrote in message
> news:49f72c2c$0$2295$91cee783@newsreader01.highway.telekom.at...
>> JIMMIE schrieb:
>>
>>> How was the transistor used, as much information you can give would be
>>> helpful, frequency voltages power anything you can think of.
>>>
>>> Jimmie
>> Hi,
>> the transistor is unused sitting in my junkbox and is waiting for
>> something to do. hi
>> I have got more of them. If i can't find any infos, then i will try to
>> build,for example, a Norton ampl. and compare it with one of my
>> favorites like 2N5109 But voltages and power are vitally to know.
>>
>> 73 Herb
>
> Gee! just save it for show.
>
Yeah for my grandchildren!
73 Herb

613. Re: If Superheterodyne, why not Subheterodyne?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-30 09:43:05 UTC
From: "Michael A. Terrell" <mike.terrell@earthlink.net>
Message-ID: <5o6dnchnGeo372TUnZ2dnUVZ_rqdnZ2d@earthlink.com>
Source record: 2816
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

John Larkin wrote:
>
> On Mon, 20 Apr 2009 13:57:26 -0700 (PDT), Tim Shoppa
> <shoppa@trailing-edge.com> wrote:
>
> >On Apr 20, 3:44 pm, John Larkin
> ><jjSNIPlar...@highTHISlandtechnology.com> wrote:
> >> On Mon, 20 Apr 2009 12:23:53 -0700 (PDT), Tim Shoppa
> >>
> >> <sho...@trailing-edge.com> wrote:
> >> >On Apr 20, 1:10 pm, John Larkin
> >> ><jjSNIPlar...@highTHISlandtechnology.com> wrote:
> >>
> >> >>http://en.wikipedia.org/wiki/Superheterodyne_receiver
> >>
> >> >I saw that in Wikipedia too. I didn't believe it, it doesn't make
> >> >sense. Why not just call all radio frequencies and IF frequencies
> >> >above 20kHz "supersonic"? Then all radios (*) are supersonic, and
> >> >we're back to super meaning nothing at all.
> >>
> >> Possibly because heterodyne receivers mixed to sonic frequencies.
> >
> >I didn't really trust Wikipedia on this (it uses unusual language to
> >talk about perfectly conventional subjects) but I did find my December
> >1922 QST, and it says (page 11):
> >
> > In December, 1919, Major E. H. Armstrong gave
> > publicity to an indirect method of obtaining
> > short-wave amplification, called the Super-
> > Heterodyne. The idea is to reduce the incoming
> > frequency which may be, say 1,500,000 cycles
> > (200 meters), to some suitable super-audible
> > frequency which can be amplified efficiently, then
> > passing this current through a radio frequency
> > amplifier and finally rectifying and carrying on
> > to one or two stages of audio frequency
> > amplification.
> >
> >To me that sounds a little less awkward and more natural than the
> >derivation that Wikipedia tries to draw.
> >
> >Tim N3QE
>

> I did like the wiki bit about people using hundred-tube TRF receivers.

And the claim that a TRF receiver was simpler to use than a
superï¿½heterodyne. It makes you wonder if the author even knows how a
TRF receiver works. Most had a separate knob per tuned circuit, since
the attempts at gear driven tuners didn't track very well.

--
You can't have a sense of humor, if you have no sense!

614. Re: Frequency doubling: Is bandpass filtering needed?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-30 10:21:28 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <0Lednb30Td065mTUnZ2dnUVZ_uidnZ2d@bright.net>
Source record: 2817

Joerg wrote:

>
> BTW, in the olden days we preferred 3x, 5x per stage. Two 3x stages
> would give you 9x. The most brazen ones (not me) did a direct 7x or even
> 9x. We just drove transistors in class C real hard.

Or today, many of us just overdrive an untuned MMIC amplifier and filter
out the unwanted harmonics...

Scott
N0EDV

615. Re: Frequency doubling: Is bandpass filtering needed?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-30 10:29:26 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <a4fKl.81798$DP1.79105@attbi_s22>
Source record: 2818

>> BTW, in the olden days we preferred 3x, 5x per stage. Two 3x stages would
>> give you 9x. The most brazen ones (not me) did a direct 7x or even 9x. We
>> just drove transistors in class C real hard.
>
> Or today, many of us just overdrive an untuned MMIC amplifier and filter
> out the unwanted harmonics...
>
> Scott
> N0EDV
>
And often have unwanted sometimes unfound parametric oscillations that have
nothing to do with harmonic content.

W4ZCB

616. Re: Motorola transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-30 10:47:39 UTC
From: Highland Ham <rfburns@allbands.net>
Message-ID: <YqudnXdeutIIHGTUnZ2dnUVZ8gCdnZ2d@pipex.net>
Source record: 2819

JIMMIE wrote:
> I dont think SS was a house number. I remember using some of the SS
> transistors in my military days. If I am correct they were made in the
> 60s and are just long time obsolete.. The ones I remember were used in
> a servo amp for a mag tape drive and were bad about going out. When
> the drive would fail we almost immediately would change the SS
> transistors as a first course of troubleshooting since they were very
> easy to change(socketed) and usually the problem.
>
> Here is a list of transistor prefixes SS was used on Motorola silicon
> transistors:
>
> Here is a list of semiconductor prefixes.
>
> Pro electron A... (germanium)
> Prefixes in the Datenblattsammlung:AA... AC... AD... AE... AF... AS...
> OUTER ONE... AY...
> of the manufacturers: AEG Telefunken, SIEMENS, Sescosem>sgs thomson,
> VALVO>PHILIPS
etc ...etc

Tnx Jimmie for this list ....very useful

Frank GM0CSZ / KN6WH

617. Re: Experimenting with Coils for Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-30 11:59:47 UTC
From: Bill M <radioexray@geeemail.com>
Message-ID: <gtc3rm086a@news7.newsguy.com>
Source record: 2820

K7ITM wrote:
> On Apr 28, 5:20 am, Bill M <radioex...@geeemail.com> wrote:
>> K7ITM wrote:
>>> On Apr 27, 8:02 pm, Bill M <radioex...@geeemail.com> wrote:
>>>> K7ITM wrote:
>>>>> To put some numbers on what Paul suggested:
>>>>> If I want an unloaded coil Q of 2000 at 10MHz,
>>>> I stopped here.
>>>> I'd expect to need a....
>>>> No way you'll ever see 2000 Q at 10 Mcs. Can't happen. Some guys are
>>>> approaching 2000 at 1 MC BCB but there's lots of expensive hoops to jump
>>>> through to reach that point. Simply cannot be had at 10 Mcs. 200-300
>>>> on a good SW coil is about all that can be achieved.
>>> ...
>>> Interesting comment. In the filters I build for test fixtures, I use
>>> air-core coils that are about 1" diameter and 1" long, and they give
>>> me Qu in excess of 300 at 10MHz. For what I do, I don't need Qu up in
>>> the thousands, and don't have room for really big coils, but can you
>>> give me a reason I shouldn't expect Qu to scale linearly with size up
>>> to the point where radiation losses become significant?
>>> Can you tell me why I should think that the inductance calculator at
>>> http://hamwaves.com/antennas/inductance.htmlis not giving me accurate
>>> results when I put in, say, D=130mm, n=20, l=260mm, d=7mm, and
>>> f=10MHz? It agrees with other independent ways I have to estimate the
>>> Qu of the ~1 inch coils I build, and those coils measure within
>>> engineering tolerance of the estimates.
>> Self-capacitance (ultimately self-resonance) is always a contributing
>> factor that prevents coils from achieving their maximum theoretical Q.
>> Estimating coils whose Q is going to fall in the 200 range for other
>> reasons is relatively easy but that doesn't mean you can scale upwards
>> proportionately.
>>
>> I build air coils in the 3 inch range along the lines of what is
>> pictured here, http://www.sparkbench.com/homebrew/grebe/cr18.html
>>
>> They only *measure* in the 250 range. Silver-plated wire could
>> certainly improve a coil of this size but no way would you achieve
>> numbers like 2000.
>>
>> -Bill
>
> OK, I was curious. Was I way off-base, or is it reasonable to think
> that you can get a 10MHz Qu considerably higher than 250 (and possibly
> up in the stratosphere above 1000)? I'm not going to spend the time,

> effort and money to build a seriously large coil as the theory
> suggests I'd need, but I did wind a somewhat smaller one...
>
> I wound 15 turns of #10 AWG (2.55mm) bare copper with about 2.25
> inches ID and 3 inches long. I resonated it with 3 * 12pF C0G
> capacitors; it resonates at 9.088MHz. I coupled an output to an
> analyzer through 1pF tapped one turn up from the "cold" end, and
> loosely coupled an input from the analyzer's source using a one-turn
> loop spaced away from the coil. My back-of-the-envelope calculation
> says such a coil with air insulation should have a Qu around 740 at
> 9MHz. In a tank circuit, the finite Q of the capacitors will lower
> the tank Q below that value. What I actually measure is a 3dB
> bandwidth of 15.87kHz, for a tank Q of 572. OK, so that's a bit lower
> than I might have expected. BUT--this coil is wound on a length of
> black ABS drain pipe, which is an absolutely terrible thing to use as
> a coil form if you're trying to get the highest possible Q. (My plan
> was originally to take the coil off the form after I wound it, but it
> had too much of a mind of its own about what shape it was going to
> assume. I've wound some smaller self-supporting coils, but this one
> didn't work that way.)
>
> I'm convinced by this little 'speriment that I could build an LC tank
> resonant at 10MHz with a tank Q above 1000 with no trouble--and
> probably _well_ above 1000 if I used really high Q capacitors and just
> enough low-loss solid insulation to keep the coil turns properly
> spaced. I don't need one at the moment, but if I ever do, I sure
> won't be afraid to try it.
>
> Cheers,
> Tom

Ok, I admit to lowballing my practical estimates. I don't want to be argumentative about it but it the steps of increase become incrementally more difficult to obtain as you approach higher levels of Q. Never any harm in trying to make the best possible coil for the application.

Good luck with your projects!

-Bill

618. Re: interchangeable coils etc: new ideas for connectors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-30 13:31:20 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <5e6e9f89-d287-4d68-a4da-77da13b0e5c4@s38g2000prg.googlegroups.com>
Source record: 2821

On Apr 29, 1:52 pm, spamhog <n1...@hotmail.com> wrote:
> QUESTIONS:
>
> - I don't recall seeing examples of this, including components or
> groups of components that are
> .   * multiple
> .   * functionally separate
> .   * RF-segregated
> .   * RF-hot at the same time
> .   * at successive stages on a signal path
> .   * on a single plug-in card.
>
> Other than the HRO drawers, are there any?

I think Ten-Tec has a HF transceiver with plug-in modules, I don't know exactly what's in each module.

The Norcal Sierra is a pretty spiffy implementation of I think exactly what you are talking about. URL for a handbook article with really nice pictures:

http://www.arrl.org/tis/info/pdf/96hb1789.pdf

Tim.

619. Re: Frequency doubling: Is bandpass filtering needed?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-04-30 16:15:12 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <q8kKl.20098$as4.2660@nlpi069.nbdc.sbc.com>
Source record: 2822

Harold E. Johnson wrote:
>>> BTW, in the olden days we preferred 3x, 5x per stage. Two 3x stages would
>>> give you 9x. The most brazen ones (not me) did a direct 7x or even 9x. We
>>> just drove transistors in class C real hard.
>> Or today, many of us just overdrive an untuned MMIC amplifier and filter
>> out the unwanted harmonics...
>>
>> Scott
>> N0EDV
>>
> And often have unwanted sometimes unfound parametric oscillations that have
> nothing to do with harmonic content.
>

If a huge drab-green truck stops in front of the house and folks in
fatigues and army boots hop off then the unfound oscillation has been
found ;-)

--
73, Joerg

620. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-01 06:00:03 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1241157601@panix.com>
Source record: 2823
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

621. Re: Frequency doubling: Is bandpass filtering needed?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-01 10:38:24 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <RvudnSG6sPGGTGfUnZ2dnUVZ_rCdnZ2d@bright.net>
Source record: 2824

Scott wrote:

>
> Or today, many of us just overdrive an untuned MMIC amplifier and filter
> out the unwanted harmonics...
>
> Scott
> N0EDV
>

Or should I say, we filter to SELECT the harmonic we want....

Scott

622. Re: Frequency doubling: Is bandpass filtering needed?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-01 10:39:26 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <RvudnSC6sPHETGfUnZ2dnUVZ_rCdnZ2d@bright.net>
Source record: 2825

Harold E. Johnson wrote:
>>> BTW, in the olden days we preferred 3x, 5x per stage. Two 3x stages would
>>> give you 9x. The most brazen ones (not me) did a direct 7x or even 9x. We
>>> just drove transistors in class C real hard.
>> Or today, many of us just overdrive an untuned MMIC amplifier and filter
>> out the unwanted harmonics...
>>
>> Scott
>> N0EDV
>>
> And often have unwanted sometimes unfound parametric oscillations that have
> nothing to do with harmonic content.
>
> W4ZCB
>
>
Probably true, but the spectrum analyzer shows anything amiss fairly well ;)

Scott

623. Re: Frequency doubling: Is bandpass filtering needed?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-01 10:45:32 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <ptudnSLcjuRVT2fUnZ2dnUVZ_rmdnZ2d@bright.net>
Source record: 2826

Joerg wrote:
> Harold E. Johnson wrote:
>>>> BTW, in the olden days we preferred 3x, 5x per stage. Two 3x stages
>>>> would give you 9x. The most brazen ones (not me) did a direct 7x or
>>>> even 9x. We just drove transistors in class C real hard.
>>> Or today, many of us just overdrive an untuned MMIC amplifier and
>>> filter out the unwanted harmonics...
>>>
>>> Scott
>>> N0EDV
>>>
>> And often have unwanted sometimes unfound parametric oscillations that
>> have nothing to do with harmonic content.
>>
>
> If a huge drab-green truck stops in front of the house and folks in
> fatigues and army boots hop off then the unfound oscillation has been
> found ;-)
>

Listening to all the "crap" on the bands these days, I doubt ANY truck from the government would ever show up ;) However, that being said, as hams, we all need to make sure our "house is clean"...now about all that other "crap"...has anyone else noticed all the interference these days on 2M from other sources of "spurious junk"??? Examples: I pull up to gas pumps and the squelch opens on my 2M radio...driving down the Interstate, I pass semi trucks and get a static burst from the speaker...Drive through town, listening to 145.19 and get static bursts (this just happens to be a cable TV frequency...isn't the idea of cable TV to keep the signals INSIDE the cable?)....

Scott
N0EDV

624. Re: Frequency doubling: Is bandpass filtering needed?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-01 16:25:57 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <woFKl.25774$c45.10239@nlpi065.nbdc.sbc.com>
Source record: 2827

Scott wrote:
> Joerg wrote:
>> Harold E. Johnson wrote:
>>>>> BTW, in the olden days we preferred 3x, 5x per stage. Two 3x stages
>>>>> would give you 9x. The most brazen ones (not me) did a direct 7x or
>>>>> even 9x. We just drove transistors in class C real hard.
>>>> Or today, many of us just overdrive an untuned MMIC amplifier and
>>>> filter out the unwanted harmonics...
>>>>
>>>> Scott
>>>> N0EDV
>>>>
>>> And often have unwanted sometimes unfound parametric oscillations
>>> that have nothing to do with harmonic content.
>>>
>>
>> If a huge drab-green truck stops in front of the house and folks in
>> fatigues and army boots hop off then the unfound oscillation has been
>> found ;-)
>>
>
> Listening to all the "crap" on the bands these days, I doubt ANY truck
> from the government would ever show up ;) However, that being said, as
> hams, we all need to make sure our "house is clean"...now about all that
> other "crap"...has anyone else noticed all the interference these days
> on 2M from other sources of "spurious junk"??? Examples: I pull up to
> gas pumps and the squelch opens on my 2M radio...driving down the
> Interstate, I pass semi trucks and get a static burst from the
> speaker...Drive through town, listening to 145.19 and get static bursts
> (this just happens to be a cable TV frequency...isn't the idea of cable
> TV to keep the signals INSIDE the cable?)....
>

Sure, but when you see how cable "professionals" handle stuff you'd get the goose bumps. We don't have a cable subscription but a cable box down the street. Often I see workers in the street and when walking the dogs next day the lid on the green box is askew. Heck, often they didn't even slide the lid all the way in, let alone lock it. Being a guy who can't stand the sight of electronics just rotting and corroding away because of neglect I always push it back on. Once the lid was completely off, it rained and water was dripping from all the coaxes. This doesn't exactly improve shielding effectiveness ;-)

--
Regards, Joerg

http://www.analogconsultants.com/

625. Re: Frequency doubling: Is bandpass filtering needed?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-01 16:55:29 UTC
From: mikea <mikea@mikea.ath.cx>
Message-ID: <15mrc6-srb2.ln1@mikea.ath.cx>
Source record: 2828

Joerg <notthisjoergsch@removethispacbell.net> wrote in
<woFKl.25774$c45.10239@nlpi065.nbdc.sbc.com>:
> Scott wrote:
>> Joerg wrote:

>>> If a huge drab-green truck stops in front of the house and folks in
>>> fatigues and army boots hop off then the unfound oscillation has been
>>> found ;-)

>> Listening to all the "crap" on the bands these days, I doubt ANY truck
>> from the government would ever show up ;) However, that being said, as
>> hams, we all need to make sure our "house is clean"...now about all that
>> other "crap"...has anyone else noticed all the interference these days
>> on 2M from other sources of "spurious junk"??? Examples: I pull up to
>> gas pumps and the squelch opens on my 2M radio...driving down the
>> Interstate, I pass semi trucks and get a static burst from the
>> speaker...Drive through town, listening to 145.19 and get static bursts
>> (this just happens to be a cable TV frequency...isn't the idea of cable
>> TV to keep the signals INSIDE the cable?)....

> Sure, but when you see how cable "professionals" handle stuff you'd get
> the goose bumps. We don't have a cable subscription but a cable box down
> the street. Often I see workers in the street and when walking the dogs
> next day the lid on the green box is askew. Heck, often they didn't even
> slide the lid all the way in, let alone lock it. Being a guy who can't
> stand the sight of electronics just rotting and corroding away because
> of neglect I always push it back on. Once the lid was completely off, it
> rained and water was dripping from all the coaxes. This doesn't exactly
> improve shielding effectiveness ;-)

The FCC *does* sometimes pursue interference and leakage complaints
against cable companies. It may take a while to get them moving, but
there are NOVs (Notice of Violation)s filed by the FCC against some
cable companies with more leakage than allowed.

A fair number of cable techs are hams, too, though not all. Calling the
cableco office and reporting interference, with a followup paper letter,
generally will get someone's attention.

Around here (Central Oklahoma, EM15gf in particular), it's the LED
traffic signals and the casino signs that put out hash. The traffic
signals are bad up around 2 meters, and there's one casino sign that was
taking everything from 40 (or 80) meters up through 2 meters.

HB content: I'm thinking of building one of the little receivers shown
at <http://mikea.ath.cx/1-chip-rx.html/>, just for hunting QRM. Note:

the second image has some editing performed on it to make some things a
little clearer; the first one is as it came off EDN.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

626. Re: Frequency doubling: Is bandpass filtering needed?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-02 06:54:06 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <j6SKl.263276$UR4.132721@en-nntp-09.dc1.easynews.com>
Source record: 2829

"mikea" <mikea@mikea.ath.cx> wrote in message
news:15mrc6-srb2.ln1@mikea.ath.cx...
> HB content: I'm thinking of building one of the little receivers shown
> at <http://mikea.ath.cx/1-chip-rx.html/>, just for hunting QRM.

I like his sentence, "you can do only so much work on a notebook computer with no reference material around." Wow -- 1997, before ubiquitous high-speed Internet access (...reference material on pretty much anything you want in seconds...) in airports was available! And it doesn't even seem that long ago now!

I suspect taking a radio like that to an airport these days is also going to get you a lot of close scrutiny going through security... so I like your idea of using it for QRM hunting.

627. Re: Frequency doubling: Is bandpass filtering needed?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-02 12:06:33 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <d9CdnUsWUJvbqmHUnZ2dnUVZ_vidnZ2d@bright.net>
Source record: 2830

Joel Koltner wrote:

>
> I suspect taking a radio like that to an airport these days is also going to
> get you a lot of close scrutiny going through security...
>
>
Speaking of getting "jacked up" by "the man"...try setting up a dish for
10 GHz these days at a county park...been there, done that ;)

Scott, N0EDV
Still buildin' stuff for the microwave bands (for me and for others)...
http://corbenflyer.tripod.com/

628. Re: Join the Most Exclusive Club on 20M!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-02 16:42:40 UTC
From: "bill.meara@gmail.com" <bill.meara@gmail.com>
Message-ID: <f52bebc0-8b95-46f9-8e1e-3dcb0ac00180@m24g2000vbp.googlegroups.com>
Source record: 2831
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Apr 25, 11:13 pm, klu...@panix.com (Scott Dorsey) wrote:
> Perhaps you've heard of the Colorburst Club, that elite band of 80M
> hams that hang out around the colorburst frequency using homebrew rigs
> and crystals scrapped from old TV sets.
>
> Now is your chance to become a part of a group so much more restricted
> that perhaps you've never heard of it before. You see, 14.31818 is
> a standard microprocessor clock frequency, and consequently there are
> surplus crystals available for it, right in the middle of the soon to
> be active twenty-meter amateur band. And you can join the specialized
> and esoteric bunch who hang out there.
>
> All you need to do is send me $1 for your pair of 14.31818 MHz crystals,
> and you can do with them what you like. You can use them in your own
> homebrew QRP rig, or in an exciter driving a commercial transmitter to
> the legal limit. There's no end to the fun you can have when you have
> the power and the glory of being able to hang out with the best of the
> best on 14.31818. These crystals are made of genuine quartz, carefully
> A-T cut by anonymous and unknown craftsmen in a distant land, and then
> lapped to frequency with actual abrasives. You can use them to talk
> anywhere in the world.
>
> Once you're on 14.31818 you'll be one of a tight group of people so
> secret that nobody knows who they are. Other clubs issue certificates
> of membership, but the 14.31818 club is SO SECRET that we won't give
> it away that you're a member by issuing a certificate. Only you will
> know for sure that you have the honor of being a member.
>
> Is this whole thing actually a ploy for me to unload a lot of surplus
> microprocessor crystals? Of course. My wife is threatening to throw
> them out if I don't get them out of the living room. But that in no
> way diminishes the importance of this club. So don't delay, send your
> money now.
> --scott
>
> --
> "C'est un Nagra. C'est suisse, et tres, tres precis."

Scott: Great idea, but with the rocks on the operating freq I think
you need to use either AM or DSB. I recommend the latter. Go for
it! 73 Bill I0/N2CQR

629. Re: Frequency doubling: Is bandpass filtering needed?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-02 18:52:06 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <AD0LI.13288$jZ1.11084@flpi144.ffdc.sbc.com>
Source record: 2832

Joel Koltner wrote:
> "mikea" <mikea@mikea.ath.cx> wrote in message
> news:15mrc6-srb2.ln1@mikea.ath.cx...
>> HB content: I'm thinking of building one of the little receivers shown
>> at <http://mikea.ath.cx/1-chip-rx.html/>, just for hunting QRM.
>
> I like his sentence, "you can do only so much work on a notebook computer with
> no reference material around." Wow -- 1997, before ubiquitous high-speed
> Internet access (...reference material on pretty much anything you want in
> seconds...) in airports was available! And it doesn't even seem that long ago
> now!
>

I don't agree with Steve there. In the early 90's I regularly carried my trusty old Compaq Contura 410 on longhaul flights. And I sure was glad it allowed up to 6 hours on a battery charge. Did a lot of schematics, module specs and so on. Seen many business execs with their high faluting IBM laptops fold'em because their batteries were at zilch, grumpily watching me plugging along until 2nd mealtime.

The trick was to place asterisks in the document whenever I could not complete something because I didn't have the datasheet right there. At the destination I'd then go from one asterisk to the next and complete the module spec. Same for new non-lib CAD parts where I didn't have the pinout, I just placed an asterisk in the schematic. One can get a whole lot of work done at an airport or during a flight.

Nowadays you can carry tens of thousands of PDF datasheets on the hard drive of your laptop. Easily the equivalent of a large book shelf full of databooks.

> I suspect taking a radio like that to an airport these days is also going to
> get you a lot of close scrutiny going through security... so I like your idea
> of using it for QRM hunting.
>

I was lazy and just bought a Realistic Jetstream pocket radio. $30 or $40, looks like a normal pocket radio but has regular AM plus airband, no FM.

--
Regards, Joerg

http://www.analogconsultants.com/

630. Re: interchangeable coils etc: new ideas for connectors?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-02 21:29:39 UTC
From: spamhog <n1jpr@hotmail.com>
Message-ID: <1ee468e1-9abe-441c-9fdf-be9d04bb18be@l5g2000vbc.googlegroups.com>
Source record: 2833

Thank you Tim, problem solved. As you said the Sierra multiband CW transceiver proves the viability of edgecards for plug-in band-specific subassemblies, the article even points out how simpler the plug-in implementation is, compared to the switching solutions for the same problem, citing Wayne Burdick, N6KR's older Safari-4.

After a bit of checking, the current sockets are these:
- Manufacturer: www.sullinscorp.com p.n. EBM25DRXH
- Digi-Key: p.n. S3355-ND

PBT/Phosphor Bronze, Contact Surface: .000010” Gold
Termination: .000100” Pure Tin, Matte
.156” [3.96mm] Contact Centers
50 total contacts, Dual Readout
.200” [5.08mm] Row Spacing; .137”[3.48] Long Dip Solder, straight
Mounting With .125" Hole

Pretty sure I can find similar edgecards & sockets around here.

Thanks again.

Filippo

631. Re: XTAL Radio Receiver Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-03 03:09:57 UTC
From: tack1@flash.net
Message-ID: <14a3bd99-066f-4ae9-983c-6112e7198fe9@n8g2000vbb.googlegroups.com>
Source record: 2834

On Apr 24, 7:35 pm, Bill M <radioex...@geeemail.com> wrote:
> David wrote:
> > On Apr 20, 1:34 pm, David <DavidBR...@gmail.com> wrote:
> >> Looking for Crystal Radio Receiver Circuits, that have a voltage
> >> quadrupler to increase headphone volume without batteries or AC power.
>
> > On my original post i was, and still looking for a quadrupler circuit,
> > not information on why it does not work.
>
> Sorry. Frankly I've never seen one but I guess you could lash something
> together easy enough. May try asking over at the Rap-n-Tap forum. If
> anybody knows of one that group would surely know.
>
> Rgds,
> Bill

Greetings; I just happened upon this discussion while searching for more crystal set information. I've tinkered with "free power" sets back in the seventies, and am currently an experimenter/collector with/ of vintage radio. It is possible to build voltage triplers and quadruplers for crystal radio, but it isn't practical. No one does it since it doesn't work very well. Pretty crappy.too much loss in diodes Waste of time. BUT, certain full wave set-ups DO work and work quite well. There has been much engineering and engineer-speak concerning crystal radio. Much SPICE work, much analysis's, many mathematical equations. But there appears to be a paradigm going on that makes it verboten to consider the lost cycle. Standard crystal sets (and those that use several detector diodes in parallel like the schottky 2380) are half wave rectifiers. What about the other half of the Electromagnetic wave? Half the potential power of the radio wave is gone, wasted. It can be recovered and utilized. But it must be done correctly. At any given cycle the current must flow through one diode, and only one (I'm considering multiple diodes in parallel as one here). So bridge rectifiers are out. Triplers and quads are out. You can use a coil with a center tap, essentially two half-wave rectifiers, each one detecting half the signal. Another way that works is making a half-wave voltage doubler. Imagine a standard crystal diode set-up; tank coil on the left, diode at the top with cathode line to the right facing the 'phones, and the anode end facing left towards the coil. Now add a fairly large capacitor, mica or low-loss metal film or poly inserted between the diode's anode and the coil. The system still works as a standard crystal set; except for a little capacitive reactance, the signal passes along as usual. Now picture a second diode with it's cathode end connected to the

connection between the capacitor and the first diodes anode. Again, this setup works like a standard crystal radio, when the cycle is positive. But now, when the cycle turns negative, instead of the negative cycle being blocked by the first diode and being wasted, the negative cycle is "shorted" out by the second diode, and goes to ground. Shunted to ground, but not wasted. The capacitor now has a charge on it equal to the RMS value of the wave times the square root of 2, or 1.414. It's been charged. Electrons are piled up on the right hand side of the capacitor, towards the anode end of the first diode. Now when the signal swings positive again, the electrons of the signal pass around through the negative/ground side, through the 'phones, through the cathode end of the first diode, and out the anode of the first diode, where they encounter the capacitor. It doesn't exactly work like this, but this is a good way to get the picture. Anyway, the electrons going out the anode end encounter the capacitor where electrons are piled up/stored on the capacitor's plate facing the anode end of the diode. The two charges combine, nearly doubling the power.

Try at least a 1000 (.001 uf) picofarad capacitor. Some folk use 5000 or a .01uf. You should still use a filter cap across the 'phones, like about 500p.

I've seen where people have built such a circuit, and claim it's no good. One such circuit only had a 30p capacitor. Of course it didn't work! There's nothing new about this type of voltage doubler that makes use of the other half of the wave. There's nothing new about a full-wave rectifier using two diodes (one for each wave cycle) and a center-tapped coil. it's been published back in the early 20th century. With a good antenna you can drive a high-impedance speaker!

632. Re: XTAL Radio Receiver Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-04 00:57:13 UTC
From: Bill M <radioexray@geeemail.com>
Message-ID: <gtlehd025o3@news5.newsguy.com>
Source record: 2835

tack1@flash.net wrote:

> What about the other half of
> the Electromagnetic wave? Half the potential power of the radio wave
> is gone, wasted. It can be recovered and utilized. But it must be
> done correctly.

Hi tack. I've seen you on some of the other forums.

No disagreement in that you can recover the other half and add things together. I offered the full-wave centre-tapped coil as an example.

But that only works for humble 'local station' circuitry.

How can we do the same thing for low-level/high selectivity circuits? I dunno. The predominant thinking is that you get the voltage 'gain' by going to the moon with hi-q rf circuitry which is at odds with a bunch of diodes configured as a multiplier because of the loading factor. Or having some other mass of wire on the same coil form. Kills the Q and consequently kills off the voltage gain.

Now if a guy has enough room...I'm only being partly facetious...to have tuned circuit A separated far enough away from tuned circuit B (or C or D) he could probably find a way to combine them. A good hi-q circuit might require 12 inches plus of physical isolation. I've not seen anybody approach it that way . Probably because the expense and effort of multiple tanks is mitigated by less effort on a good single tank.

Crystal sets remain to be a fascinating 'open book' for experimentation.

-Bill

633. Re: Frequency doubling: Is bandpass filtering needed?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-04 21:31:03 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <s8JLl.278599$UR4.78867@en-nntp-09.dc1.easynews.com>
Source record: 2836

"Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
news:AD0Ll.13288$jZ1.11084@flpi144.ffdc.sbc.com...
> I don't agree with Steve there. In the early 90's I regularly carried my
> trusty old Compaq Contura 410 on longhaul flights.

...and I bet your 50MHz 486SX2 seemed just as fast with the software you were using at the time as your 1.6GHz netbook does now? ;-)

> And I sure was glad it allowed up to 6 hours on a battery charge. Did a lot
> of schematics, module specs and so on. Seen many business execs with their
> high faluting IBM laptops fold'em because their batteries were at zilch,
> grumpily watching me plugging along until 2nd mealtime.

Some of them might have considered the shorter battery life a *feature*, you know. "Well, I did what I could on the annual report until the battery died, at which point I decided to see how good the stewardesses were at making martinis!"

---Joel

634. Re: Frequency doubling: Is bandpass filtering needed?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-04 21:52:30 UTC
From: Joerg <notthisjoergsch@removethispacbell.net>
Message-ID: <JsJLl.14784$jZ1.14030@flpi144.ffdc.sbc.com>
Source record: 2837

Joel Koltner wrote:
> "Joerg" <notthisjoergsch@removethispacbell.net> wrote in message
> news:AD0Ll.13288$jZ1.11084@flpi144.ffdc.sbc.com...
>> I don't agree with Steve there. In the early 90's I regularly carried my
>> trusty old Compaq Contura 410 on longhaul flights.
>
> ...and I bet your 50MHz 486SX2 seemed just as fast with the software you were
> using at the time as your 1.6GHz netbook does now? ;-)
>

Ok, strictly DOS on business trips. There was no need for more, and
besides PDF viewing and stuff there still isn't. OrCad-SDT, MS-Word 5.0,
CompuServe email client, PSpice, some filter simulators, beam profile
calculator. What more could mankind want?

>> And I sure was glad it allowed up to 6 hours on a battery charge. Did a lot
>> of schematics, module specs and so on. Seen many business execs with their
>> high faluting IBM laptops fold'em because their batteries were at zilch,
>> grumpily watching me plugging along until 2nd mealtime.
>
> Some of them might have considered the shorter battery life a *feature*, you
> know. "Well, I did what I could on the annual report until the battery died,
> at which point I decided to see how good the stewardesses were at making
> martinis!"
>

Oh, I had my brewskys, cognac and the occasional bloody mary while using
the laptop. Of course, nowadays it's easier since I have that
spill-proof Durabook laptop that is almost mil-spec. The old Compaq
began to physically disintegrate after roughly 1/2 million miles,
courtesy of a few really rough flights and landings. At the end the
battery kept falling out of it.

--
Regards, Joerg

http://www.analogconsultants.com/

"gmail" domain blocked because of excessive spam.
Use another domain or send PM.

635. Re: Join the Most Exclusive Club on 20M!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-05 01:50:03 UTC
From: kludge@panix.com
Message-ID: <gto60bqgv1@panix2.panix.com>
Source record: 2838
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

bill.meara@gmail.com <bill.meara@gmail.com> wrote:
>
>Scott: Great idea, but with the rocks on the operating freq I think
>you need to use either AM or DSB. I recommend the latter. Go for
>it! 73 Bill I0/N2CQR

That's why if you order now you get this FREE MODULATION TRANSFORMER.
Postage and oil disposal fees not included.
--scott

--
"C'est un Nagra. C'est suisse, et tres, tres precis."

636. Re: Join the Most Exclusive Club on 20M!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-05 03:07:43 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <Ca-dnUZxW97oMGLUnZ2dnUVZ_oVi4p2d@bright.net>
Source record: 2839
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Scott Dorsey wrote:
> bill.meara@gmail.com <bill.meara@gmail.com> wrote:
>> Scott: Great idea, but with the rocks on the operating freq I think
>> you need to use either AM or DSB. I recommend the latter. Go for
>> it! 73 Bill I0/N2CQR
>
> That's why if you order now you get this FREE MODULATION TRANSFORMER.
> Postage and oil disposal fees not included.
> --scott
>
I'm in an even more exclusive 20M club. The "I never operate 20M club"
Seriously! Every time I listen on 20M, sounds like a
cesspool...oops...let me don my asbestos underwear...

Scott
Mainly 6M-10 GHz

637. WSJT Users...

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-07 03:07:16 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <TIqdnQ4tddHKzZ_XnZ2dnUVZ_tWdnZ2d@bright.net>
Source record: 2840

Wondering if any of you who use Dimesion 4 software to keep the PC clock accurate, have you noticed that it appears the site (tick.usno.navy.mil) that is used for time updates is down??? My last correction was on 29 April 2009. Keeps timing out. Anyone else see this?

Scott
N0EDV

638. Re: WSJT Users...

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-07 03:29:16 UTC
From: JB <nospam@goofball.net>
Message-ID: <gAsMl.4900$b11.3921@nwrddc02.gnilink.net>
Source record: 2841

> Wondering if any of you who use Dimesion 4 software to keep the PC clock
> accurate, have you noticed that it appears the site (tick.usno.navy.mil)
> that is used for time updates is down??? My last correction was on 29
> April 2009. Keeps timing out. Anyone else see this?
>
> Scott
> N0EDV

Make sure your firewall allows it. Check your logs. The site works for me.

639. Seeking New FAQ/Intro Maintainers for rec.radio.amateur.*

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-07 06:05:00 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/recruitment-1-1241676300@panix.com>
Source record: 2842
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/recruitment
Revision: 1.1 2007/09/29 18:42:47
Posting-Frequency: posted monthly
URL: http://www.faqs.org/faqs/radio/personal-intro/

Changes followed by "|".

The rec.radio.info newsgroup, first established in 1993, has been
recently revived by an active moderation team. We are currently seeking
suitable information, FAQ, and bulletin articles from the entire
rec.radio.* newsgroup hierarchy for simultaneous cross-posting to our
newsgroup.

We are seeking a replacement maintainer for the following information
bulletin formerly posted to rec.radio.amateur.* (and currently archived
at http://www.faqs.org/faqs/radio/personal-intro/ ):

radio/personal-intro
Subject: Guide to the rec.radio Newsgroups
Maintainer: jeffreyh@Hawaii.Edu (Jeffrey Herman)
Last Posted: 9 Nov 2001 06:18:17 GMT
Posting-Frequency: 15th of each month

We are willing to provide any technical support necessary to get this
article updated and automatically posted again at a regular interval.
This would include establishing contact with the original maintainer for
any necessary permissions. We would prefer to seek a new, dedicated
maintainer at this time, rather than start auto-posting the original
article ourselves.

For more information about our newsgroup, see:

http://www.panix.com/~rram/usenet/rri/index.html

Please direct any comments, questions, or criticisms to
rec-radio-info-request@panix.com.
```

640. Re: WSJT Users...

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-07 10:32:29 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <CZSdnWoz66YjJZ_XnZ2dnUVZ_t2dnZ2d@bright.net>
Source record: 2843

JB wrote:
>> Wondering if any of you who use Dimesion 4 software to keep the PC clock
>> accurate, have you noticed that it appears the site (tick.usno.navy.mil)
>> that is used for time updates is down??? My last correction was on 29
>> April 2009. Keeps timing out. Anyone else see this?
>>
>> Scott
>> N0EDV
>
> Make sure your firewall allows it. Check your logs. The site works for me.

Hmmm...mine used to work. In fact, it was working fine up until April
29th...I selected a different site (St. Paul, MN) last night and it is
updating normally...

Scott
N0EDV

641. Re: WSJT Users...

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-07 12:47:52 UTC
From: Bert Hyman <bert@iphouse.com>
Message-ID: <Xns9C044F530754FVeebleFetzer@216.250.184.7>
Source record: 2844

In news:TIqdnQ4tddHKzZ_XnZ2dnUVZ_tWdnZ2d@bright.net Scott
<acepilotREMOVE@bloomer.net> wrote:

> Wondering if any of you who use Dimesion 4 software to keep the PC clock
> accurate, have you noticed that it appears the site (tick.usno.navy.mil)
> that is used for time updates is down??? My last correction was on 29
> April 2009. Keeps timing out. Anyone else see this?

I just changed my config to point to that server and it's working OK for
me.

I usually use my ISP's own time server.

--
Bert Hyman St. Paul, MN bert@iphouse.com

642. Re: WSJT Users...

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-07 18:34:02 UTC
From: Fred McKenzie <fmmck@aol.com>
Message-ID: <fmmck-12C8D2.14340107052009@nntp.aioe.org>
Source record: 2845

In article <TIqdnQ4tddHKzZ_XnZ2dnUVZ_tWdnZ2d@bright.net>,
Scott <acepilotREMOVE@bloomer.net> wrote:

> it appears the site (tick.usno.navy.mil)
> that is used for time updates is down

Scott-

If tick is down, try tock.usno.navy.mil.

Fred
K4DII

643. Re: WSJT Users...

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-08 09:55:59 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <CfudnbmMMcEtnJnXnZ2dnUVZ_h2dnZ2d@bright.net>
Source record: 2846

Bert Hyman wrote:
> In news:TIqdnQ4tddHKzZ_XnZ2dnUVZ_tWdnZ2d@bright.net Scott
> <acepilotREMOVE@bloomer.net> wrote:
>
>> Wondering if any of you who use Dimesion 4 software to keep the PC clock
>> accurate, have you noticed that it appears the site (tick.usno.navy.mil)
>> that is used for time updates is down??? My last correction was on 29
>> April 2009. Keeps timing out. Anyone else see this?
>
> I just changed my config to point to that server and it's working OK for
> me.
>
> I usually use my ISP's own time server.
>
Hi Bert,
Thanks...I suspect it's something with my ISP. I have lots of these
things happening...someone sends me a link to a webpage and I copy/paste
the address and it says it can't find the site yet it seems everyone
else can. I changed to the nss.nts.umn.edu site and it's working fine.

644. Re: WSJT Users...

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-08 10:02:56 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <E_-dnXXp1cbMnpnXnZ2dnUVZ_rSdnZ2d@bright.net>
Source record: 2847

Fred McKenzie wrote:
> In article <TIqdnQ4tddHKzZ_XnZ2dnUVZ_tWdnZ2d@bright.net>,
> Scott <acepilotREMOVE@bloomer.net> wrote:
>
>> it appears the site (tick.usno.navy.mil)
>> that is used for time updates is down
>
> Scott-
>
> If tick is down, try tock.usno.navy.mil.
>
> Fred
> K4DII
Hi Fred,
Actually, I did that with the same results. Several others didn't seem to work, but I found one in St. Paul, MN that works fine. Others have reported that "tick" is working fine for them. I suspect something with my ISP as I have had quite a few problems viewing websites that others send me a link to and I get the "site could not be found" error message. I've called my ISP and they say that everything is working OK. Some have suggested my firewall may be blocking sites, etc., but the tick site had been working fine up until April 29th when I got the last update and I haven't dinked around with any router settings here for ages...mystifying :(

Scott
N0EDV

645. Re: WSJT Users...

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-08 11:47:20 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <7213cca2-d4bc-4bf5-a8f9-abcc56e1edda@u9g2000pre.googlegroups.com>
Source record: 2848

On May 8, 6:02 am, Scott <acepilotREM...@bloomer.net> wrote:
> Fred McKenzie wrote:
> > In article <TIqdnQ4tddHKzZ_XnZ2dnUVZ_tWdn...@bright.net>,
> > Scott <acepilotREM...@bloomer.net> wrote:
>
> >> it appears the site (tick.usno.navy.mil)
> >> that is used for time updates is down
>
> > Scott-
>
> > If tick is down, try tock.usno.navy.mil.
>
> > Fred
> > K4DII
>
> Hi Fred,
> Actually, I did that with the same results. Several others didn't seem
> to work, but I found one in St. Paul, MN that works fine. Others have
> reported that "tick" is working fine for them. I suspect something with
> my ISP as I have had quite a few problems viewing websites that others
> send me a link to and I get the "site could not be found" error message.
>   I've called my ISP and they say that everything is working OK. Some
> have suggested my firewall may be blocking sites, etc., but the tick
> site had been working fine up until April 29th when I got the last
> update and I haven't dinked around with any router settings here for
> ages...mystifying :(
>
> Scott
> N0EDV

Hey OM:

I likes to use tcpdump, or the GUI version Wireshark. These baby's are
great sniffers I found a java problem I had once, because of a setting
in a router, I had no control over. Seems someone got the great idea
to block ICMP protocol going thru the router. It was this very
protocol that java used to acknowledge the extension of the MTU from
the max allowable 1500 to a larger MTU. My computer would sit there
waiting forever for that acknowledgment it was never going to get.
Later I found out why ICMP was blocked. As the router had been taken
down by a denial of service request attack via ICMP. Lowering the MTU
on my computer to allow for java to extend the lower MTU without
having to do a ICMP request, fixed the trouble. I ended up using 1300
MTU.

Then there's whois, it's possible you have the IP addy stored away in the program and it doesn't use a DNS to look up the IP addy and the mil site may have changed the IP addy in which case your program won't find the site it was looking for. Your browser will find it if it's using a DNS to look up the site. But if the settings are right/wrong it is possible for the browser to use a cached IP addy that would be stale, and so you don't go to where you wanted to go.

73 OM
de n8zu

646. Homebrew antenna question please?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-09 13:32:56 UTC
From: Tuuk <nealr9000@yahoo.com>
Message-ID: <dCfNl.37974$D9.32038@read2.cgocable.net>
Source record: 2849

Hi

Hope I can get some advice from the experts about my antenna.

I have a 50ft self supporting tower, my goal is to put 2 antennas up. One dipole and one omni.

I have an old omni direction antenna that I wish to put at the top, it has 3 traps in it with no writting on it so I am not sure what bands it will be suitable for however I have a pretty good tuner so I can use it on most bands. I also have one of those brackets that allows me to use ground planes with it, 4 ground planes aluminum and longest possible is what I try because the wind brings them down fast.

Second is a simple dipole, I think it is 60 foot each side or little more however it hangs over the trees on each side so it isn't perfectly straight. It is connected to a ladder line then connected to my tuner then my Drake TR7.

These two seem to work OK for me in the past, I hope for some advice on these and please answer the following questions.

1- Any idea what the omni direction antenna with the three traps is for which bands? It is about 22ft long with the three traps on the bottom half, old aluminum antenna.

2- What about those ground planes? Are they necessary?

3- On the dipole, I have a 1:1 balun in the garage, should I use this with the dipole? The antenna tuner already has some device to balance so is it necessary for the other balun? Someone told me it is so I must ask.

any advice would be great,,, thanks

Neal

647. Re: Homebrew antenna question please?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-09 14:49:08 UTC
From: mikea <mikea@mikea.ath.cx>
Message-ID: <4ohgd6-ndk.ln1@mikea.ath.cx>
Source record: 2850

Tuuk <nealr9000@yahoo.com> wrote in <dCfNl.37974$D9.32038@read2.cgocable.net>:

> 1- Any idea what the omni direction antenna with the three traps is for
> which bands? It is about 22ft long with the three traps on the bottom half,
> old aluminum antenna.

Can you borrow an MFJ 259 or equivalent gadget? It will tell you where
the antenna is resonant. I use mine a *lot* for things like this.

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

648. Re: Homebrew antenna question please?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-09 19:24:52 UTC
From: sorry-spammers <"w9wi\\@(sorry-spammers)">
Message-ID: <XcmdnZkWkbo2RZjXnZ2dnUVZ_gGdnZ2d@earthlink.com>
Source record: 2751

Tuuk wrote:
> Hi
>
> Hope I can get some advice from the experts about my antenna.
>
> I have a 50ft self supporting tower, my goal is to put 2 antennas up.
> One dipole and one omni.
>
> I have an old omni direction antenna that I wish to put at the top, it
> has 3 traps in it with no writting on it so I am not sure what bands it
> will be suitable for however I have a pretty good tuner so I can use it
> on most bands. I also have one of those brackets that allows me to use
> ground planes with it, 4 ground planes aluminum and longest possible is
> what I try because the wind brings them down fast.
>
> Second is a simple dipole, I think it is 60 foot each side or little
> more however it hangs over the trees on each side so it isn't perfectly
> straight. It is connected to a ladder line then connected to my tuner
> then my Drake TR7.
>
> These two seem to work OK for me in the past, I hope for some advice on
> these and please answer the following questions.
>
> 1- Any idea what the omni direction antenna with the three traps is for
> which bands? It is about 22ft long with the three traps on the bottom
> half, old aluminum antenna.

probably 20, 15, and 10 meters but "mikea" has the right idea,
suggesting you try a SWR analyzer on it.

> 2- What about those ground planes? Are they necessary?

Yes, probably. (there were some vertical antennas designed that don't
need them but this doesn't sound like one of them) Usually with a
vertical antenna, the ground plane is half the antenna - to put it
differently, if you don't put up the ground plane, half the antenna is
missing.

> 3- On the dipole, I have a 1:1 balun in the garage, should I use this
> with the dipole? The antenna tuner already has some device to balance so
> is it necessary for the other balun? Someone told me it is so I must ask.

If you're center-feeding an antenna with ladder line then I don't think
there's any need for a balun at the antenna. And if your tuner has a
balanced output for connecting the ladder line, then you don't need a
balun at the shack either.

It would be more useful if you were using coaxial cable to feed the dipole.

--

Doug Smith W9WI
Pleasant View, TN EM66

649. Re: Homebrew antenna question please?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-10 02:20:39 UTC
From: "Dr. Barry L. Ornitz" <BLOrnitz48@charter.net>
Message-ID: <%RqNl.3898$qP.621@newsfe03.iad>
Source record: 2752

"sorry-spammers" <""w9wi\"@(sorry-spammers)"> wrote in message
news:XcmdnZkWkbo2RZjXnZ2dnUVZ_gGdnZ2d@earthlink.com...
> Tuuk wrote:

>> I have a 50ft self supporting tower, my goal is to put 2 antennas up.
>> One dipole and one omni.
>>
>> I have an old omni direction antenna that I wish to put at the top, it
>> has 3 traps in it with no writing on it so I am not sure what bands it
>> will be suitable for however I have a pretty good tuner so I can use
>> it on most bands. I also have one of those brackets that allows me to
>> use ground planes with it, 4 ground planes aluminum and longest
>> possible is what I try because the wind brings them down fast.
>>
>> Second is a simple dipole, I think it is 60 foot each side or little
>> more however it hangs over the trees on each side so it isn't
>> perfectly straight. It is connected to a ladder line then connected to
>> my tuner then my Drake TR7.
>>
>> These two seem to work OK for me in the past, I hope for some advice
>> on these and please answer the following questions.
>>
>> 1- Any idea what the omni direction antenna with the three traps is
>> for which bands? It is about 22ft long with the three traps on the
>> bottom half, old aluminum antenna.
>
> *probably* 20, 15, and 10 meters but "mikea" has the right idea,
> suggesting you try a SWR analyzer on it.

With three traps, and with the size, they are likely traps for 10, 15,
and 20 meters. This would make the antenna a 4-band antenna. The traps
act like open circuits at their resonant frequency. At frequencies below
the trap's resonant frequency, the trap acts like a loading coil. So
this vertical would work on 10, 15, 20 and 40 meters. The antenna sounds
like a Hy-Gain 14AVQ or its clone.

>> 2- What about those ground planes? Are they necessary?
>
> Yes, probably. (there were some vertical antennas designed that don't
> need them but this doesn't sound like one of them) Usually with a
> vertical antenna, the ground plane is half the antenna - to put it
> differently, if you don't put up the ground plane, half the antenna is
> missing.

You will need a ground plane for 40 meters (about 33 feet), 20 meters (16.5 feet), and 10 meters (8 feet 4 inches). The wires for 40 meters would be resonant on 15 meters, the third harmonic. Allowing the radial wires to slope down at an angle will raise the feed impedance slightly. With the proper end insulators, they can assist in guying the antenna. The shorter radials can be hung below the longer radials using some CPVC pipe to separate the two a few inches.

>> 3- On the dipole, I have a 1:1 balun in the garage, should I use this
>> with the dipole? The antenna tuner already has some device to balance
>> so is it necessary for the other balun? Someone told me it is so I
>> must ask.
>
> If you're center-feeding an antenna with ladder line then I don't think
> there's any need for a balun at the antenna. And if your tuner has a
> balanced output for connecting the ladder line, then you don't need a
> balun at the shack either.
>
> It {the balun} would be more useful if you were using coaxial cable to
> feed the dipole.

Do not worry about the dipole being absolutely straight. Since you fed the dipole with ladder line, a balun at the antenna is not needed. The vertical should be fed with coaxial cable.

Using the dipole and the tuner alone will let you operate from 80 through 10 meters. There will likely be some interaction between the dipole and the vertical so tune the vertical with the dipole in place. Even if the dipole is in reality an inverted-V, its radiation will be predominantly horizontal, while the vertical will be, you guessed it, vertical. Having both a horizontally and vertically polarized antenna will allow you to switch to the one giving the best signals.

The TR-7 is a nice rig. You should enjoy using it on the HF bands. Have fun...

--
73, Dr. Barry L. Ornitz WA4VZQ
BLOrnitz48@charter.net

650. Re: Homebrew antenna question please?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-10 03:20:53 UTC
From: Tuuk <nealr9000@yahoo.com>
Message-ID: <yKrNl.29560$gf.1301@read1.cgocable.net>
Source record: 2753

Thanks for the info

Yes, that is the Hy-Gain 14AVQ antenna I have. I found the owners manual online.

http://www.hy-gain.com/man/pdf/AV-14AVQ.pdf

I will have to find someone locally to test each trap, its an old antenna and I want to make sure they are operational before I put it up. It will go on a tower about 50ft. No way I can put the gnd planes up there as the manual recommends.

The manual says its a dead short over the input termenals so I can measure that but I don't have a resonance tester.

Thanks

"Dr. Barry L. Ornitz" <BLOrnitz48@charter.net> wrote in message news:%RqNl.3898$qP.621@newsfe03.iad...
> "sorry-spammers" <""w9wi\"@(sorry-spammers)"> wrote in message
> news:XcmdnZkWkbo2RZjXnZ2dnUVZ_gGdnZ2d@earthlink.com...
>> Tuuk wrote:
>
>>> I have a 50ft self supporting tower, my goal is to put 2 antennas up.
>>> One dipole and one omni.
>>>
>>> I have an old omni direction antenna that I wish to put at the top, it
>>> has 3 traps in it with no writing on it so I am not sure what bands it
>>> will be suitable for however I have a pretty good tuner so I can use it
>>> on most bands. I also have one of those brackets that allows me to use
>>> ground planes with it, 4 ground planes aluminum and longest possible is
>>> what I try because the wind brings them down fast.
>>>
>>> Second is a simple dipole, I think it is 60 foot each side or little
>>> more however it hangs over the trees on each side so it isn't perfectly
>>> straight. It is connected to a ladder line then connected to my tuner
>>> then my Drake TR7.
>>>
>>> These two seem to work OK for me in the past, I hope for some advice on
>>> these and please answer the following questions.
>>>
>>> 1- Any idea what the omni direction antenna with the three traps is for
>>> which bands? It is about 22ft long with the three traps on the bottom
>>> half, old aluminum antenna.
>>
>> *probably* 20, 15, and 10 meters but "mikea" has the right idea,

>> suggesting you try a SWR analyzer on it.
>
> With three traps, and with the size, they are likely traps for 10, 15, and
> 20 meters. This would make the antenna a 4-band antenna. The traps act
> like open circuits at their resonant frequency. At frequencies below the
> trap's resonant frequency, the trap acts like a loading coil. So this
> vertical would work on 10, 15, 20 and 40 meters. The antenna sounds like
> a Hy-Gain 14AVQ or its clone.
>
>>> 2- What about those ground planes? Are they necessary?
>>
>> Yes, probably. (there were some vertical antennas designed that don't
>> need them but this doesn't sound like one of them) Usually with a
>> vertical antenna, the ground plane is half the antenna - to put it
>> differently, if you don't put up the ground plane, half the antenna is
>> missing.
>
> You will need a ground plane for 40 meters (about 33 feet), 20 meters
> (16.5 feet), and 10 meters (8 feet 4 inches). The wires for 40 meters
> would be resonant on 15 meters, the third harmonic. Allowing the radial
> wires to slope down at an angle will raise the feed impedance slightly.
> With the proper end insulators, they can assist in guying the antenna. The
> shorter radials can be hung below the longer radials using some CPVC pipe
> to separate the two a few inches.
>
>>> 3- On the dipole, I have a 1:1 balun in the garage, should I use this
>>> with the dipole? The antenna tuner already has some device to balance so
>>> is it necessary for the other balun? Someone told me it is so I must
>>> ask.
>>
>> If you're center-feeding an antenna with ladder line then I don't think
>> there's any need for a balun at the antenna. And if your tuner has a
>> balanced output for connecting the ladder line, then you don't need a
>> balun at the shack either.
>>
>> It {the balun} would be more useful if you were using coaxial cable to
>> feed the dipole.
>
> Do not worry about the dipole being absolutely straight. Since you fed
> the dipole with ladder line, a balun at the antenna is not needed. The
> vertical should be fed with coaxial cable.
>
> Using the dipole and the tuner alone will let you operate from 80 through
> 10 meters. There will likely be some interaction between the dipole and
> the vertical so tune the vertical with the dipole in place. Even if the
> dipole is in reality an inverted-V, its radiation will be predominantly
> horizontal, while the vertical will be, you guessed it, vertical. Having
> both a horizontally and vertically polarized antenna will allow you to
> switch to the one giving the best signals.
>

> The TR-7 is a nice rig. You should enjoy using it on the HF bands. Have
> fun...
>
> --
> 73, Dr. Barry L. Ornitz WA4VZQ
> BLOrnitz48@charter.net
>
>

651. Re: Homebrew antenna question please?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-10 04:17:32 UTC
From: Bill M <radioexray@geeemail.com>
Message-ID: <gu5kh10eio@news6.newsguy.com>
Source record: 2754

Tuuk wrote:
> Thanks for the info
>
> Yes, that is the Hy-Gain 14AVQ antenna I have. I found the owners manual
> online.
>
> http://www.hy-gain.com/man/pdf/AV-14AVQ.pdf
>
> I will have to find someone locally to test each trap, its an old
> antenna and I want to make sure they are operational before I put it up.
> It will go on a tower about 50ft. No way I can put the gnd planes up
> there as the manual recommends.
>
> The manual says its a dead short over the input termenals so I can
> measure that but I don't have a resonance tester.
>
> Thanks

I rebuilt some trap antennas many years ago and the main issues were
simply minor mechanical things. Corrosion or loose sheet metal screws.

I'd suggest giving it a good mechanically-minded workover and you'll
probably be good to go. I recall on my KLM beam that some of the
plastic 'end' boots had deteriorated within just a few years so be wary
of those plastic parts.

The bigger issue here would seem to be the ability to adjust the
antenna. The dimensions are not necessarily "plug-n-play" and even in
the best of situations with tuned radials may require some adjustment.
It can work on top of a tower without the tuned radials but WILL require
some adjusting of the lengths unless you just want to accept it as it
happens to fall. Managing a vertical like that the top of a tower is an
exercise in physics leverage-wise and its no fun to do it multiple times :(

-Bill
>
>
>
>
>
>
>
>
> "Dr. Barry L. Ornitz" <BLOrnitz48@charter.net> wrote in message
> news:%RqNl.3898$qP.621@newsfe03.iad...

>> "sorry-spammers" <""w9wi\"@(sorry-spammers)"> wrote in message
>> news:XcmdnZkWkbo2RZjXnZ2dnUVZ_gGdnZ2d@earthlink.com...
>>> Tuuk wrote:
>>
>>>> I have a 50ft self supporting tower, my goal is to put 2 antennas
>>>> up. One dipole and one omni.
>>>>
>>>> I have an old omni direction antenna that I wish to put at the top,
>>>> it has 3 traps in it with no writing on it so I am not sure what
>>>> bands it will be suitable for however I have a pretty good tuner so
>>>> I can use it on most bands. I also have one of those brackets that
>>>> allows me to use ground planes with it, 4 ground planes aluminum and
>>>> longest possible is what I try because the wind brings them down fast.
>>>>
>>>> Second is a simple dipole, I think it is 60 foot each side or little
>>>> more however it hangs over the trees on each side so it isn't
>>>> perfectly straight. It is connected to a ladder line then connected
>>>> to my tuner then my Drake TR7.
>>>>
>>>> These two seem to work OK for me in the past, I hope for some advice
>>>> on these and please answer the following questions.
>>>>
>>>> 1- Any idea what the omni direction antenna with the three traps is
>>>> for which bands? It is about 22ft long with the three traps on the
>>>> bottom half, old aluminum antenna.
>>>
>>> *probably* 20, 15, and 10 meters but "mikea" has the right idea,
>>> suggesting you try a SWR analyzer on it.
>>
>> With three traps, and with the size, they are likely traps for 10, 15,
>> and 20 meters. This would make the antenna a 4-band antenna. The
>> traps act like open circuits at their resonant frequency. At
>> frequencies below the trap's resonant frequency, the trap acts like a
>> loading coil. So this vertical would work on 10, 15, 20 and 40
>> meters. The antenna sounds like a Hy-Gain 14AVQ or its clone.
>>
>>>> 2- What about those ground planes? Are they necessary?
>>>
>>> Yes, probably. (there were some vertical antennas designed that
>>> don't need them but this doesn't sound like one of them) Usually
>>> with a vertical antenna, the ground plane is half the antenna - to
>>> put it differently, if you don't put up the ground plane, half the
>>> antenna is missing.
>>
>> You will need a ground plane for 40 meters (about 33 feet), 20 meters
>> (16.5 feet), and 10 meters (8 feet 4 inches). The wires for 40 meters
>> would be resonant on 15 meters, the third harmonic. Allowing the
>> radial wires to slope down at an angle will raise the feed impedance
>> slightly. With the proper end insulators, they can assist in guying
>> the antenna. The shorter radials can be hung below the longer radials

>> using some CPVC pipe to separate the two a few inches.
>>
>>>> 3- On the dipole, I have a 1:1 balun in the garage, should I use
>>>> this with the dipole? The antenna tuner already has some device to
>>>> balance so is it necessary for the other balun? Someone told me it
>>>> is so I must ask.
>>>
>>> If you're center-feeding an antenna with ladder line then I don't
>>> think there's any need for a balun at the antenna. And if your tuner
>>> has a balanced output for connecting the ladder line, then you don't
>>> need a balun at the shack either.
>>>
>>> It {the balun} would be more useful if you were using coaxial cable
>>> to feed the dipole.
>>
>> Do not worry about the dipole being absolutely straight. Since you
>> fed the dipole with ladder line, a balun at the antenna is not
>> needed. The vertical should be fed with coaxial cable.
>>
>> Using the dipole and the tuner alone will let you operate from 80
>> through 10 meters. There will likely be some interaction between the
>> dipole and the vertical so tune the vertical with the dipole in
>> place. Even if the dipole is in reality an inverted-V, its radiation
>> will be predominantly horizontal, while the vertical will be, you
>> guessed it, vertical. Having both a horizontally and vertically
>> polarized antenna will allow you to switch to the one giving the best
>> signals.
>>
>> The TR-7 is a nice rig. You should enjoy using it on the HF bands.
>> Have fun...
>>
>> --
>> 73, Dr. Barry L. Ornitz WA4VZQ
>> BLOrnitz48@charter.net
>>
>>
>

652. Re: Join the Most Exclusive Club on 20M!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-10 17:44:54 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnh0e4km.1pbn.bit-bucket@shell.config.com>
Source record: 2755
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Tue, 05 May 2009 03:07:43 +0000, Scott wrote:
> Scott Dorsey wrote:
>> bill.meara@gmail.com <bill.meara@gmail.com> wrote:
>>> Scott: Great idea, but with the rocks on the operating freq I think
>>> you need to use either AM or DSB. I recommend the latter. Go for
>>> it! 73 Bill I0/N2CQR
>>
>> That's why if you order now you get this FREE MODULATION TRANSFORMER.
>> Postage and oil disposal fees not included.
>> --scott
>>
> I'm in an even more exclusive 20M club. The "I never operate 20M club"
> Seriously! Every time I listen on 20M, sounds like a
> cesspool...oops...let me don my asbestos underwear...

Yep. It was the head-butt-style jerks and the cesspool environment
on 75M and 20M that drove me to check out 6M some 12-13 years ago.
I've never looked back.

Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
38.24N 104.55W | @ config.com | Jonesy | OS/2
* Killfiling google & XXXXbanter.com: jonz.net/ng.htm

653. Re: Join the Most Exclusive Club on 20M!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-10 20:33:01 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <nqmdnZ9V56tjpJrXnZ2dnUVZ_gmdnZ2d@bright.net>
Source record: 2756
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Allodoxaphobia wrote:

>>>
>> I'm in an even more exclusive 20M club. The "I never operate 20M club"
>> Seriously! Every time I listen on 20M, sounds like a
>> cesspool...oops...let me don my asbestos underwear...
>
> Yep. It was the head-butt-style jerks and the cesspool environment
> on 75M and 20M that drove me to check out 6M some 12-13 years ago.
> I've never looked back.
>
> Jonesy

Amen brother...When mobile, I use 17M if I need to be on HF. Otherwise, I am like you...I have 6M through 1296 plus 10 GHz now. Well, actually, I just finished up building the 1296 transverter today and did a quick checkout on the TX side...only 2 mW...should be about 20 mW, so I have to check into it, but I'm busy finishing up the checkout of a customers 1296 unit today so I can get it shipped to him (I built it for him).

Scott
N0EDV
http://corbenflyer.tripod.com/

654. Help with data for a microwave klystron power amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-11 10:18:07 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <a0ee99c9-296a-445e-80b0-50a642e0e7dd@y6g2000prf.googlegroups.com>
Source record: 2757

Hi All,

A friend has acquired several Hughes 8781AH Klystron Amplifiers (from AML-STX-141 transmitters).

The tubes apparently will generate about +45dBm at 12GHz from -2200V, waveguide is WR75 / WG17 (10-15GHz)

Can anyone help with further information about this tube please.

I am interested in knowing the bandwidth (will it run at 10GHz).

Fire extinguisher and change of underwear are available for the first powering up...

Thanks,

Mark

655. Linear Amplifier Plans 1-16 Pill On DVD

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-11 18:13:06 UTC
From: kc8qjp <criscok@hotmail.com>
Message-ID: <4a086abc@x-privat.org>
Source record: 2758
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew
Body handling: Inline uuencoded payload not displayed: s.gif

This is the DVD every CB or Ham Radio Operator has been looking for who
likes to build their own Amplifiers.

1 to 16 Pill AMP Designs.....................

http://cgi.ebay.com/Linear-Amplifier-Plans-1-16-Pill-On-DVD_W0QQitemZ200332937473QQcmdZVie
wItemQQptZLH_DefaultDomain_0?hash=item2ea4c60901&_trksid=p3286.c0.m14&_trkparms=72%3A1234%
7C66%3A2%7C65%3A12%7C39%3A1%7C240%3A1318%7C301%3A0%7C293%3A1%7C294%3A50

Description

Item Specifics - Item Condition
Condition: New

This is the DVD every CB or Ham Radio Operator has been
looking for who likes to build their own Amplifiers.

1 to 16 Pill AMP Designs

Step by Step directions

Full Schematics

Full Color Pics of step by step build of each Box 1-16
pill

Full Parts List for each Design

And most important were to by all the parts you need is
included.

This DVD makes it very easy for the Novice to build their
Own Box

This is just plans we are not selling anything but plans
on how to build these units and its for Educational Purpose only.

No Returns or Money back.Each DVD is checked before they
are shipped to make sure they work 100%

[Inline uuencoded payload not displayed: s.gif]

656. Re: Linear Amplifier Plans 1-16 Pill On DVD

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-11 22:19:33 UTC
From: Highland Ham <rfburns@allbands.net>
Message-ID: <4-adndQKs58LOZXXnZ2dnUVZ8oKdnZ2d@pipex.net>
Source record: 2759
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

kc8qjp wrote:
> This is the DVD every CB or Ham Radio Operator has been looking for who
> likes to build their own Amplifiers.

==========
CBers should NOT build any transmitting equipment ....because that is
illegal !

Frank GM0CSZ / KN6WH

657. Re: Linear Amplifier Plans 1-16 Pill On DVD

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-12 01:45:11 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <47532aab-fe3e-49e4-9e41-ec35da576a1c@r3g2000vbp.googlegroups.com>
Source record: 2760
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On May 11, 2:13 pm, "kc8qjp" <cris...@hotmail.com> wrote:
> This is the DVD every CB or Ham Radio Operator has been looking for who
> likes to build their own Amplifiers.
>
> 1 to 16 Pill AMP Designs.....................
>
> http://cgi.ebay.com/Linear-Amplifier-Plans-1-16-Pill-On-DVD_W0QQitemZ...
>
>   Description
>
>   Item Specifics - Item Condition
>   Condition: New
>
>   This is the DVD every CB or Ham Radio Operator has been
> looking for who likes to build their own Amplifiers.
>
>   1 to 16 Pill AMP Designs
>
>   Step by Step directions
>
>   Full Schematics
>
>   Full Color Pics of step by step build of each Box 1-16
> pill
>
>   Full Parts List for each Design
>
>   And most important were to by all the parts you need is
> included.
>
>   This DVD makes it very easy for the Novice to build their
> Own Box
>
>   This is just plans we are not selling anything but plans
> on how to build these units and its for Educational Purpose only.
>
>   No Returns or Money back.Each DVD is checked before they
> are shipped to make sure they work 100%
>
> begin 666 s.gif
> M1TE&.#EA`0`!`)'_`/___P```,# P ```"'Y! $```(`+ `````!``$```("
> $5 $`.P``
> `

> end

I doubt if it will be long before its on the internet for free.

Jimmie

658. Re: Linear Amplifier Plans 1-16 Pill On DVD

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-12 02:48:50 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <hKmdnbHcGq0PfpXXnZ2dnUVZ_ridnZ2d@bright.net>
Source record: 2761
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Highland Ham wrote:
> kc8qjp wrote:
>> This is the DVD every CB or Ham Radio Operator has been looking for
>> who likes to build their own Amplifiers.
>
> ====================================
> CBers should NOT build any transmitting equipment ....because that is
> illegal !
>
> Frank GM0CSZ / KN6WH

Not to worry...it states the plans are for educational use only! ;)
Maybe it would be good for CBers to build high voltage amps if you get
my drift ;) Just kidding...they're people too...

Scott
N0EDV

659. Superstar3900 Black + Lemm 12 Ampere

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-14 09:40:38 UTC
From: "tigerbusiness@gmail.com" <tigerbusiness@gmail.com>
Message-ID: <7fbd18be-4f09-4ab7-a0f9-b1e75631bc29@l28g2000vba.googlegroups.com>
Source record: 2762

Superstar 3900 Black
http://tinyurl.com/pq4z8v
Lemm 12 Ampere
http://tinyurl.com/oxv8op

73 51 only
Alan

660. Re-Coil an FM, MW and SW radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-14 16:22:04 UTC
From: Patrick Rimbault <Patrick.Rimbault.4524ce7@radiobanter.com>
Message-ID: <Patrick.Rimbault.4524ce7@radiobanter.com>
Source record: 2763

heya fellas,

I recently took apart an old radio. My interest in radios has been growing for the past few months. The only problem is that I have no where near the funds required to set myself up with even a decent portable radio. Anyway, back to this radio. It was probably made in the late 80's to early 90's. It says its a Bluapunkt Sabre 90... Does this mean anything to you guys?

It is almost a standard radio, except that it can handle SW. Now, when I opened it up, I noticed 3 coils of wire wrapped around some sort of a tube. In my brain, im think that these 3 coils are for the 3 different frequency bands! So, now this gets me thinking, maybe I can make some different coils, and so change the frequency band? Is it that simple, or is there something more to it? I really want to listen in on our nearby airport at 121.9MHz... I think.

Are there any websites that I can visit to help aswell.

Kind regards,
Patrick

--
Patrick Rimbault

661. Re: Re-Coil an FM, MW and SW radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-14 22:49:39 UTC
From: Bill M <radioexray@geemail.com>
Message-ID: <gui7660o9g@news1.newsguy.com>
Source record: 2764

Patrick Rimbault wrote:

>
> It is almost a standard radio, except that it can handle SW. Now, when
> I opened it up, I noticed 3 coils of wire wrapped around some sort of a
> tube. In my brain, im think that these 3 coils are for the 3 different
> frequency bands! So, now this gets me thinking, maybe I can make some
> different coils, and so change the frequency band? Is it that simple,
> or is there something more to it? I really want to listen in on our
> nearby airport at 121.9MHz... I think.
>
> Are there any websites that I can visit to help aswell.
>
> Kind regards,
> Patrick

Sounds like you are describing the ferrite rod internal antenna. The
three coils might be LW, MW or 1-2 shortwave bands.

These are actually coils for the antenna input stage for those lower
frequency bands. The equivalent "FM" coil is likely going to be a
little tiny thing of several turns mounted on a circuit board.

Thats only half the story. There's also a set of oscillator coils for
each band....maybe in little square cans or out in the open.

The quick answer is no, this isn't a simple modification. Many of us
(me included) have done such things :) so I can't say its not possible
but you would be much farther ahead maybe building a little Aircraft
band converter kit of something of that nature.

Just my 2c

-Bill

>
>
>
>

662. Re: Re-Coil an FM, MW and SW radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-14 23:21:32 UTC
From: Rich Griffiths <richgrif@one.net>
Message-ID: <9bydnbqoGNXhOpHXnZ2dnUVZ_oudnZ2d@posted.nuvoxcommunications>
Source record: 2765

On Thu, 14 May 2009 18:49:39 -0400, Bill M wrote:

> Patrick Rimbault wrote:
>
>
>> It is almost a standard radio, except that it can handle SW. Now, when
>> I opened it up, I noticed 3 coils of wire wrapped around some sort of a
>> tube. In my brain, im think that these 3 coils are for the 3 different
>> frequency bands! So, now this gets me thinking, maybe I can make some
>> different coils, and so change the frequency band? Is it that simple,
>> or is there something more to it? I really want to listen in on our
>> nearby airport at 121.9MHz... I think.
>>
>> Are there any websites that I can visit to help aswell.
>>
>> Kind regards,
>> Patrick
>
> Sounds like you are describing the ferrite rod internal antenna. The
> three coils might be LW, MW or 1-2 shortwave bands.
>
> These are actually coils for the antenna input stage for those lower
> frequency bands. The equivalent "FM" coil is likely going to be a
> little tiny thing of several turns mounted on a circuit board.
>
> Thats only half the story. There's also a set of oscillator coils for
> each band....maybe in little square cans or out in the open.
>
> The quick answer is no, this isn't a simple modification. Many of us
> (me included) have done such things :) so I can't say its not possible
> but you would be much farther ahead maybe building a little Aircraft
> band converter kit of something of that nature.
>
> Just my 2c
>
> -Bill
>
>
>

Also, if I remember correctly, aircraft use AM in the 108-136 MHz range.
So modifying the 88-108 MHz FM portion of the receiver wouldn't work.
And modifying one of the lower AM/SSB bands to work on VHF would be quite
a stretch.

... Rich W2RG

663. Re: Re-Coil an FM, MW and SW radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-14 23:25:30 UTC
From: Bill M <radioexray@geemail.com>
Message-ID: <gui99d052q@news5.newsguy.com>
Source record: 2766

Rich Griffiths wrote:

>
> Also, if I remember correctly, aircraft use AM in the 108-136 MHz range.
> So modifying the 88-108 MHz FM portion of the receiver wouldn't work.

Doesn't really matter much since you can slope tune it.

-B.

664. Re: Re-Coil an FM, MW and SW radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-15 00:14:44 UTC
From: Rich Griffiths <richgrif@one.net>
Message-ID: <9bydnbWoGNVpLpHXnZ2dnUVZ_oudnZ2d@posted.nuvoxcommunications>
Source record: 2767

On Thu, 14 May 2009 19:25:30 -0400, Bill M wrote:

> Rich Griffiths wrote:
>
>
>> Also, if I remember correctly, aircraft use AM in the 108-136 MHz
>> range. So modifying the 88-108 MHz FM portion of the receiver wouldn't
>> work.
>
> Doesn't really matter much since you can slope tune it.
>
> -B.

It's been a long time since I did it, but isn't slope detection for receiving an FM signal using an AM receiver? This is the reverse situation.

... Rich

665. Re: Re-Coil an FM, MW and SW radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-15 00:24:48 UTC
From: dplatt@radagast.org
Message-ID: <gbpud6-trk.ln1@radagast.org>
Source record: 2768

In article <gui99d052q@news5.newsguy.com>,
Bill M <radioexray@geemail.com> wrote:

>> Also, if I remember correctly, aircraft use AM in the 108-136 MHz range.
>> So modifying the 88-108 MHz FM portion of the receiver wouldn't work.

>Doesn't really matter much since you can slope tune it.

IIRC, slope tuning can be used to allow an AM receiver to demodulate
FM (albeit somewhat crudely).

Does it work in reverse? Can you offset-tune an FM receiver, and get
its discriminator to demodulate an AM carrier-and-sidebands?

Seems to me that this wouldn't necessarily work... the
huge-amounts-of-gain-and-then-clip-the-result architecture of an FM's
IF strip is going to equalize out the amplitude variations in the AM
signal pretty effectively, won't it?

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

666. Re: Re-Coil an FM, MW and SW radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-15 00:41:54 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <e813c742-d6dd-4e76-996f-645302c0720d@21g2000vbk.googlegroups.com>
Source record: 2769

On May 14, 8:24 pm, dpl...@radagast.org (Dave Platt) wrote:
> In article <gui99d0...@news5.newsguy.com>,
> Bill M <radioex...@geemail.com> wrote:
>
> >> Also, if I remember correctly, aircraft use AM in the 108-136 MHz range.
> >> So modifying the 88-108 MHz FM portion of the receiver wouldn't work.
> >Doesn't really matter much since you can slope tune it.
>
> IIRC, slope tuning can be used to allow an AM receiver to demodulate
> FM (albeit somewhat crudely).
>
> Does it work in reverse? Can you offset-tune an FM receiver, and get
> its discriminator to demodulate an AM carrier-and-sidebands?
>
> Seems to me that this wouldn't necessarily work... the
> huge-amounts-of-gain-and-then-clip-the-result architecture of an FM's
> IF strip is going to equalize out the amplitude variations in the AM
> signal pretty effectively, won't it?
>
> --
> Dave Platt <dpl...@radagast.org>   AE6EO
> Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
>   I do _not_ wish to receive unsolicited commercial email, and I will
>   boycott any company which has the gall to send me such ads!

If an FM radio has a decent amount of limiting forget about receiving
FM but if the limiting can be removed or it doesnt have too much you
can receive AM on an FM receiver thought it may be fairly distored but
it most likely will be copyable. For example I have an ICOM two meter
FM transceiver that will tune the VHF aircraft frequencies. Sorry
but I forget the model # at present I bought it about 15 years ago and
havent tused it in 10 years.

Jimmie

667. Re: Re-Coil an FM, MW and SW radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-15 04:32:28 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <13d9476f-c7e4-4ed0-8e18-b7b068d64d6f@z16g2000prd.googlegroups.com>
Source record: 2770

Hey OM:

Back that far they been using PLL for FM demod. Only because they
needed to demod stereo phase, at 15 some Khz. Find the slope in that
PLL and it'll detect AM. But most osc's in those things are only good
to 110Mhz, with 10.7 Mhz IF, that'll get you to 120.7Mhz You just
can't make the capacitance of the circuit go away with a coil.
If you are lucky the airport your near will be within 108 to 120.7 Mhz

You might as well just build a converter, like back in the day when FM
first came out they used a converter to take 88 to 108 MHz and put it
on the AM band. All you did was plug the box into the antenna of your
AM car radio and viola' FM and with a reverb you could even simulate
stereo. That was b4 8 track tape decks.

Heck I made a living making and selling a converter for police band
453Mhz to AM radio band you could actually tune 4 police channels in
the Detroit, MI USA area with the converter and any AM radio. We used
a CB crystal for the oscillator multiplied it up to 452 Mhz and viola'
police band on any AM radio. the converter was the size of a pack of
cigarettes.

This link will give you an idea now a days things are a lot easier:
http://tinyurl.com/qwk9pw

73 OM

de n8zu

On May 14, 8:41 pm, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> On May 14, 8:24 pm, dpl...@radagast.org (Dave Platt) wrote:
>
>
>
> > In article <gui99d0...@news5.newsguy.com>,
> > Bill M <radioex...@geemail.com> wrote:
>
> > > Also, if I remember correctly, aircraft use AM in the 108-136 MHz range.
> > > So modifying the 88-108 MHz FM portion of the receiver wouldn't work.
> > >Doesn't really matter much since you can slope tune it.
>
> > IIRC, slope tuning can be used to allow an AM receiver to demodulate
> > FM (albeit somewhat crudely).
>
> > Does it work in reverse? Can you offset-tune an FM receiver, and get
> > its discriminator to demodulate an AM carrier-and-sidebands?

>
> > Seems to me that this wouldn't necessarily work... the
> > huge-amounts-of-gain-and-then-clip-the-result architecture of an FM's
> > IF strip is going to equalize out the amplitude variations in the AM
> > signal pretty effectively, won't it?
>
> > --
> > Dave Platt <dpl...@radagast.org>   AE6EO
> > Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
> >   I do _not_ wish to receive unsolicited commercial email, and I will
> >   boycott any company which has the gall to send me such ads!
>
> If an FM radio has a decent amount of limiting forget about receiving
> FM but if the limiting can be removed or it doesnt have too much you
> can receive AM on an FM receiver thought it may be fairly distored but
> it most likely will be copyable. For example I have an ICOM two meter
> FM transceiver that will tune the VHF aircraft frequencies. Sorry
> but I forget the model # at present I bought it about 15 years ago and
> havent tused it in 10 years.
>
> Jimmie

668. Re: Linear Amplifier Plans 1-16 Pill On DVD

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-15 15:45:44 UTC
From: "KD8IMG, Robert Trendel, is a twice convicted stalker of women." <mopeyzakween@yahoo.com>
Message-ID: <7a5421ab-79a2-4005-99f9-e6a812081d17@b1g2000vbc.googlegroups.com>
Source record: 2771
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On May 11, 2:13 pm, "kc8qjp" <cris...@hotmail.com> wrote:
> This is the DVD every CB or Ham Radio Operator has been looking for who
> likes to build their own Amplifiers.
>
> 1 to 16 Pill AMP Designs.....................
>
> http://cgi.ebay.com/Linear-Amplifier-Plans-1-16-Pill-On-DVD_W0QQitemZ...
>
>   Description
>
>   Item Specifics - Item Condition
>   Condition: New
>
>   This is the DVD every CB or Ham Radio Operator has been
> looking for who likes to build their own Amplifiers.
>
>   1 to 16 Pill AMP Designs
>
>   Step by Step directions
>
>   Full Schematics
>
>   Full Color Pics of step by step build of each Box 1-16
> pill
>
>   Full Parts List for each Design
>
>   And most important were to by all the parts you need is
> included.
>
>   This DVD makes it very easy for the Novice to build their
> Own Box
>
>   This is just plans we are not selling anything but plans
> on how to build these units and its for Educational Purpose only.
>
>   No Returns or Money back.Each DVD is checked before they
> are shipped to make sure they work 100%
>
> begin 666 s.gif
> M1TE&.#EA`0`!`)'_`/___P```,# P ```"'Y! $```(`+ `````!``$```("
> $5 $`.P``
> `

> end

The poster of this message is moparholic at hotmail.com...he is
forging a female ham's callsign

669. Re: Linear Amplifier Plans 1-16 Pill On DVD

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-15 20:44:17 UTC
From: Bill M <radioexray@geemail.com>
Message-ID: <gukk720rl2@news3.newsguy.com>
Source record: 2772
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

KD8IMG, Robert Trendel, is a twice convicted stalker of women. wrote:

>
> The poster of this message is moparholic at hotmail.com...he is
> forging a female ham's callsign

You're kidding, right?

-Bill

670. Re: Linear Amplifier Plans 1-16 Pill On DVD

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-15 21:00:35 UTC
From: Roger & Suzanne Nair <r&snair@lycos.com>
Message-ID: <gukl5rbqb2@news.mixmin.net>
Source record: 2773
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

"KD8IMG, Robert Trendel, is a twice convicted stalker of women."
<mopeyzakween@yahoo.com> wrote in message
news:7a5421ab-79a2-4005-99f9-e6a812081d17@b1g2000vbc.googlegroups.com...
On May 11, 2:13 pm, "kc8qjp" <cris...@hotmail.com> wrote:
> This is the DVD every CB or Ham Radio Operator has been looking for who
> likes to build their own Amplifiers.
>
> 1 to 16 Pill AMP Designs.....
>
> http://cgi.ebay.com/Linear-Amplifier-Plans-1-16-Pill-On-DVD_W0QQitemZ...
>
> Description
>
> Item Specifics - Item Condition
> Condition: New
>
> This is the DVD every CB or Ham Radio Operator has been
> looking for who likes to build their own Amplifiers.
>
> 1 to 16 Pill AMP Designs
>
> Step by Step directions
>
> Full Schematics
>
> Full Color Pics of step by step build of each Box 1-16
> pill
>
> Full Parts List for each Design
>
> And most important were to by all the parts you need is
> included.
>
> This DVD makes it very easy for the Novice to build their
> Own Box
>
> This is just plans we are not selling anything but plans
> on how to build these units and its for Educational Purpose only.
>
> No Returns or Money back.Each DVD is checked before they
> are shipped to make sure they work 100%
>
> begin 666 s.gif

> M1TE&.#EA`0`!`)'_`/___P```,# P ```"'Y! $```(`+ `````!``$```("
> $5 $`.P``
> `
> end

> The poster of this message is moparholic at hotmail.com...he is
> forging a female ham's callsign
>
>
Who in their right mind would want to pretend to be kc8qjp crisco kathy???

http://wwwcsif.cs.ucdavis.edu/~loewen/fat-woman.jpg

I don't want her
you can have her
she's too fat
for me

671. Re: Re-Coil an FM, MW and SW radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-15 22:45:51 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <090de694-cc4c-464e-b216-9c5e547e1f65@v17g2000vbb.googlegroups.com>
Source record: 2774

On May 15, 12:32 am, raypsi <RBorow...@gmail.com> wrote:
> Hey OM:
>
> Back that far they been using PLL for FM demod. Only because they
> needed to demod stereo phase, at 15 some Khz. Find the slope in that
> PLL and it'll detect AM. But most osc's in those things are only good
> to 110Mhz, with 10.7 Mhz IF, that'll get you to 120.7Mhz You just
> can't make the capacitance of the circuit go away with a coil.
> If you are lucky the airport your near will be within 108 to 120.7 Mhz
>
> You might as well just build a converter, like back in the day when FM
> first came out they used a converter to take 88 to 108 MHz and put it
> on the AM band. All you did was plug the box into the antenna of your
> AM car radio and viola' FM and with a reverb you could even simulate
> stereo. That was b4 8 track tape decks.
>
> Heck I made a living making and selling a converter for police band
> 453Mhz to AM radio band you could actually tune 4 police channels in
> the Detroit, MI USA area with the converter and any AM radio. We used
> a CB crystal for the oscillator multiplied it up to 452 Mhz and viola'
> police band on any AM radio. the converter was the size of a pack of
> cigarettes.
>
> This link will give you an idea now a days things are a lot
easier:http://tinyurl.com/qwk9pw
>
> 73 OM
>
> de n8zu
>
> On May 14, 8:41 pm, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
>
>
>
> > On May 14, 8:24 pm, dpl...@radagast.org (Dave Platt) wrote:
>
> > > In article <gui99d0...@news5.newsguy.com>,
> > > Bill M <radioex...@geemail.com> wrote:
>
> > > > Also, if I remember correctly, aircraft use AM in the 108-136 MHz range.
> > > > So modifying the 88-108 MHz FM portion of the receiver wouldn't work.
> > > >Doesn't really matter much since you can slope tune it.
>
> > > IIRC, slope tuning can be used to allow an AM receiver to demodulate

> > > FM (albeit somewhat crudely).
>
> > > Does it work in reverse? Can you offset-tune an FM receiver, and get
> > > its discriminator to demodulate an AM carrier-and-sidebands?
>
> > > Seems to me that this wouldn't necessarily work... the
> > > huge-amounts-of-gain-and-then-clip-the-result architecture of an FM's
> > > IF strip is going to equalize out the amplitude variations in the AM
> > > signal pretty effectively, won't it?
>
> > > --
> > > Dave Platt <dpl...@radagast.org>   AE6EO
> > > Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
> > >   I do _not_ wish to receive unsolicited commercial email, and I will
> > >   boycott any company which has the gall to send me such ads!
>
> > If an FM radio has a decent amount of limiting forget about receiving
> > FM but if the limiting can be removed or it doesnt have too much you
> > can receive AM on an FM receiver thought it may be fairly distored but
> > it most likely will be copyable. For example I have an ICOM two meter
> > FM transceiver that will tune the VHF aircraft frequencies. Sorry
> > but I forget the model # at present I bought it about 15 years ago and
> > havent tused it in 10 years.
>
> > Jimmie- Hide quoted text -
>
> - Show quoted text -

I remember when those things were around. There was a group of my
friends who like to do a little street racing so we used it to keep up
with where the police were. We also used CB radio to talk to each
other. When we found out the police were on to us planing races on CB
we got where we would pass the mike around and pretend like we were
having a race and watch them run all over town. The things we had to
do back then to keep intertained.

Jimmie

672. Re: Linear Amplifier Plans 1-16 Pill On DVD

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-15 23:08:59 UTC
From: Dan Valdez <dval5@yahoo.com>
Message-ID: <4a0df615@x-privat.org>
Source record: 2775
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

```
"Roger & Suzanne Nair" <r&snair@lycos.com> wrote in message
news:gukl5r$bqb$2@news.mixmin.net...
>
> "KD8IMG, Robert Trendel, is a twice convicted stalker of women."
> <mopeyzakween@yahoo.com> wrote in message
> news:7a5421ab-79a2-4005-99f9-e6a812081d17@b1g2000vbc.googlegroups.com...
> On May 11, 2:13 pm, "kc8qjp" <cris...@hotmail.com> wrote:
>> This is the DVD every CB or Ham Radio Operator has been looking for who
>> likes to build their own Amplifiers.
>>
>> 1 to 16 Pill AMP Designs.....................
>>
>> http://cgi.ebay.com/Linear-Amplifier-Plans-1-16-Pill-On-DVD_W0QQitemZ...
>>
>> Description
>>
>> Item Specifics - Item Condition
>> Condition: New
>>
>> This is the DVD every CB or Ham Radio Operator has been
>> looking for who likes to build their own Amplifiers.
>>
>> 1 to 16 Pill AMP Designs
>>
>> Step by Step directions
>>
>> Full Schematics
>>
>> Full Color Pics of step by step build of each Box 1-16
>> pill
>>
>> Full Parts List for each Design
>>
>> And most important were to by all the parts you need is
>> included.
>>
>> This DVD makes it very easy for the Novice to build their
>> Own Box
>>
>> This is just plans we are not selling anything but plans
>> on how to build these units and its for Educational Purpose only.
>>
>> No Returns or Money back.Each DVD is checked before they
```

>> are shipped to make sure they work 100%
>>
>> begin 666 s.gif
>> M1TE&.#EA`0`!`)'_`/___P```,# P ```"'Y! $```(`+ `````!``$```("
>> $5 $`.P``
>> `
>> end
>
>> The poster of this message is moparholic at hotmail.com...he is
>> forging a female ham's callsign
>>
>>
> Who in their right mind would want to pretend to be kc8qjp crisco kathy???
>
> http://wwwcsif.cs.ucdavis.edu/~loewen/fat-woman.jpg
>
> I don't want her
> you can have her
> she's too fat
> for me
>
>
>
Is kc8qjp out of prison again?

673. Led Lcd Hdtv

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-18 08:24:46 UTC
From: Accardo@tish.com
Message-ID: <4a10f138$0$25012$586e9bf6@usenetnow.com>
Source record: 2776

Samsung UN55B7000 55-Inch 1080p 120Hz LED HDTV
Price:$3,799.99
Image: http://bestdealfinder.us/image.php?id=B001UHMVR2
Best deal: http://bestdealfinder.us/index.php?id=B001UHMVR2

Samsung UN40B7000 40-Inch 1080p 120Hz LED HDTV
Price:$2,499.99
Image: http://bestdealfinder.us/image.php?id=B001UHMVEU
Best deal: http://bestdealfinder.us/index.php?id=B001UHMVEU

Samsung UN55B6000 55-Inch 1080p 120Hz LED HDTV
Price:$3,599.99
Image: http://bestdealfinder.us/image.php?id=B001UHMVDQ
Best deal: http://bestdealfinder.us/index.php?id=B001UHMVDQ

Samsung LN55B650 55-Inch 1080p 120 Hz LCD HDTV with Red Touch of Color
Price:$2,999.99
Image: http://bestdealfinder.us/image.php?id=B001WHICF0
Best deal: http://bestdealfinder.us/index.php?id=B001WHICF0

Samsung UN46B6000 46-Inch 1080p 120Hz LED HDTV
Price:$2,799.99
Image: http://bestdealfinder.us/image.php?id=B001UHMVC2
Best deal: http://bestdealfinder.us/index.php?id=B001UHMVC2

Toshiba REGZA 42ZV650U 42-Inch 1080p LCD HDTV with ClearScan 240, Black
Price:$1,299.99
Image: http://bestdealfinder.us/image.php?id=B001TOD3J6
Best deal: http://bestdealfinder.us/index.php?id=B001TOD3J6

Sony Bravia XBR KDL-46XBR8 46-Inch 1080p 120Hz Triluminos LED LCD HDTV
Price:$3,999.99
Image: http://bestdealfinder.us/image.php?id=B001GIPMNU
Best deal: http://bestdealfinder.us/index.php?id=B001GIPMNU

Toshiba REGZA 47ZV650U 47-Inch 1080p LCD HDTV with ClearScan 240, Black
Price:$1,699.99
Image: http://bestdealfinder.us/image.php?id=B001TOD3JG
Best deal: http://bestdealfinder.us/index.php?id=B001TOD3JG

Sony Bravia XBR KDL-55XBR8 55-Inch 1080p 120Hz Triluminos LED LCD HDTV
Price:$5,499.99
Image: http://bestdealfinder.us/image.php?id=B001GIPMO4
Best deal: http://bestdealfinder.us/index.php?id=B001GIPMO4

Samsung LN55A950 55-Inch Touch of Color 1080p 120 Hz LCD HDTV
Price:$4,999.99

Image: http://bestdealfinder.us/image.php?id=B001DT0LSI
Best deal: http://bestdealfinder.us/index.php?id=B001DT0LSI

Samsung UN55B7000 55-Inch 1080p 120Hz LED HDTV
Price:$3,799.99
Image: http://bestdealfinder.us/image.php?id=B001UHMVR2
Best deal: http://bestdealfinder.us/index.php?id=B001UHMVR2

Samsung UN40B7000 40-Inch 1080p 120Hz LED HDTV
Price:$2,499.99
Image: http://bestdealfinder.us/image.php?id=B001UHMVEU
Best deal: http://bestdealfinder.us/index.php?id=B001UHMVEU

Samsung UN55B6000 55-Inch 1080p 120Hz LED HDTV
Price:$3,599.99
Image: http://bestdealfinder.us/image.php?id=B001UHMVDQ
Best deal: http://bestdealfinder.us/index.php?id=B001UHMVDQ

Samsung LN55B650 55-Inch 1080p 120 Hz LCD HDTV with Red Touch of Color
Price:$2,999.99
Image: http://bestdealfinder.us/image.php?id=B001WHICF0
Best deal: http://bestdealfinder.us/index.php?id=B001WHICF0

Samsung UN46B6000 46-Inch 1080p 120Hz LED HDTV
Price:$2,799.99
Image: http://bestdealfinder.us/image.php?id=B001UHMVC2
Best deal: http://bestdealfinder.us/index.php?id=B001UHMVC2

Toshiba REGZA 42ZV650U 42-Inch 1080p LCD HDTV with ClearScan 240, Black
Price:$1,299.99
Image: http://bestdealfinder.us/image.php?id=B001TOD3J6
Best deal: http://bestdealfinder.us/index.php?id=B001TOD3J6

Sony Bravia XBR KDL-46XBR8 46-Inch 1080p 120Hz Triluminos LED LCD HDTV
Price:$3,999.99
Image: http://bestdealfinder.us/image.php?id=B001GIPMNU
Best deal: http://bestdealfinder.us/index.php?id=B001GIPMNU

Toshiba REGZA 47ZV650U 47-Inch 1080p LCD HDTV with ClearScan 240, Black
Price:$1,699.99
Image: http://bestdealfinder.us/image.php?id=B001TOD3JG
Best deal: http://bestdealfinder.us/index.php?id=B001TOD3JG

Sony Bravia XBR KDL-55XBR8 55-Inch 1080p 120Hz Triluminos LED LCD HDTV
Price:$5,499.99
Image: http://bestdealfinder.us/image.php?id=B001GIPMO4
Best deal: http://bestdealfinder.us/index.php?id=B001GIPMO4

Samsung LN55A950 55-Inch Touch of Color 1080p 120 Hz LCD HDTV
Price:$4,999.99
Image: http://bestdealfinder.us/image.php?id=B001DT0LSI
Best deal: http://bestdealfinder.us/index.php?id=B001DT0LSI

Samsung UN55B7000 55-Inch 1080p 120Hz LED HDTV
Price:$3,799.99
Image: http://bestdealfinder.us/image.php?id=B001UHMVR2
Best deal: http://bestdealfinder.us/index.php?id=B001UHMVR2

Samsung UN40B7000 40-Inch 1080p 120Hz LED HDTV
Price:$2,499.99
Image: http://bestdealfinder.us/image.php?id=B001UHMVEU
Best deal: http://bestdealfinder.us/index.php?id=B001UHMVEU

Samsung UN55B6000 55-Inch 1080p 120Hz LED HDTV
Price:$3,599.99
Image: http://bestdealfinder.us/image.php?id=B001UHMVDQ
Best deal: http://bestdealfinder.us/index.php?id=B001UHMVDQ

Samsung LN55B650 55-Inch 1080p 120 Hz LCD HDTV with Red Touch of Color
Price:$2,999.99
Image: http://bestdealfinder.us/image.php?id=B001WHICF0
Best deal: http://bestdealfinder.us/index.php?id=B001WHICF0

Samsung UN46B6000 46-Inch 1080p 120Hz LED HDTV
Price:$2,799.99
Image: http://bestdealfinder.us/image.php?id=B001UHMVC2
Best deal: http://bestdealfinder.us/index.php?id=B001UHMVC2

Toshiba REGZA 42ZV650U 42-Inch 1080p LCD HDTV with ClearScan 240, Black
Price:$1,299.99
Image: http://bestdealfinder.us/image.php?id=B001TOD3J6
Best deal: http://bestdealfinder.us/index.php?id=B001TOD3J6

Sony Bravia XBR KDL-46XBR8 46-Inch 1080p 120Hz Triluminos LED LCD HDTV
Price:$3,999.99
Image: http://bestdealfinder.us/image.php?id=B001GIPMNU
Best deal: http://bestdealfinder.us/index.php?id=B001GIPMNU

Toshiba REGZA 47ZV650U 47-Inch 1080p LCD HDTV with ClearScan 240, Black
Price:$1,699.99
Image: http://bestdealfinder.us/image.php?id=B001TOD3JG
Best deal: http://bestdealfinder.us/index.php?id=B001TOD3JG

Sony Bravia XBR KDL-55XBR8 55-Inch 1080p 120Hz Triluminos LED LCD HDTV
Price:$5,499.99
Image: http://bestdealfinder.us/image.php?id=B001GIPMO4
Best deal: http://bestdealfinder.us/index.php?id=B001GIPMO4

Samsung LN55A950 55-Inch Touch of Color 1080p 120 Hz LCD HDTV
Price:$4,999.99
Image: http://bestdealfinder.us/image.php?id=B001DT0LSI
Best deal: http://bestdealfinder.us/index.php?id=B001DT0LSI

674. 6 to 1 balun design

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-18 13:24:36 UTC
From: alchazz <no.spam@wanted.com>
Message-ID: <okdQl.1761$wR5.875@nwrddc02.gnilink.net>
Source record: 2777

I am looking for a 6 to 1 balun, 300 ohms balanced to 50 ohms coax. I don't need one that handles transmitter power as I am only using it for a receiving antenna.

I have on hand several hundred feet of 50 ohm coax, RG58 modified (IEEE 802.3). I want to use it to connect my 300 ohm TV dipole antenna in my attic to my HDTV in the basement. And, of course, I would need a 50 ohm to 75 ohm match at the HDTV.

We only watch over-the-air TV. Why? Because I live within 2 miles of three 1000 ft TV towers. In fact, the dipole in the basement works quite well. But I do get dropouts during storms; go figure. I get 17 channels for free, so why go cable or FIOS. Nothing worthwhile there anyway.

So can someone point me to a good site for balun design. I've done the Google searches, but all that I find seem to be for high power applications.

Any help would be appreciated.

Al

675. Re: 6 to 1 balun design

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-18 13:55:31 UTC
From: Bill M <radioexray@geemail.com>
Message-ID: <gurpcm0h8j@news6.newsguy.com>
Source record: 2778

alchazz wrote:
> I am looking for a 6 to 1 balun, 300 ohms balanced to 50 ohms coax. I
> don't need one that handles transmitter power as I am only using it for a
> receiving antenna.
>
> I have on hand several hundred feet of 50 ohm coax, RG58 modified (IEEE
> 802.3). I want to use it to connect my 300 ohm TV dipole antenna in my
> attic to my HDTV in the basement. And, of course, I would need a 50 ohm
> to 75 ohm match at the HDTV.
>
> We only watch over-the-air TV. Why? Because I live within 2 miles of
> three 1000 ft TV towers. In fact, the dipole in the basement works quite
> well. But I do get dropouts during storms; go figure. I get 17 channels
> for free, so why go cable or FIOS. Nothing worthwhile there anyway.
>
> So can someone point me to a good site for balun design. I've done the
> Google searches, but all that I find seem to be for high power
> applications.
>
> Any help would be appreciated.
>
> Al
>

Have you tried the 50 ohm cable directly (with a 4:1 xfmr at the dipole)
to see how it works? The 300 ohms for the dipole, etc only apply at one
single frequency and with signals that strong there really shouldn't be
an issue with additional loss. Reflections will not show up visibly
with digital tv.

Part of the issue here is winding the balun and set transformer at UHF
frequencies. Not impossible to do with inexpensive parts (multicore
ferrites) but I wonder if its really necessary?

GL,
Bill

676. Re: 6 to 1 balun design

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-18 15:01:04 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <bFUWyrHwgXEKFwB3@g3ohx.demon.co.uk>
Source record: 2779

In message <gurpcm0h8j@news6.newsguy.com>, Bill M
<radioexray@geemail.com> writes
>alchazz wrote:
>> I am looking for a 6 to 1 balun, 300 ohms balanced to 50 ohms coax. I
>>don't need one that handles transmitter power as I am only using it
>>for a receiving antenna.
>> I have on hand several hundred feet of 50 ohm coax, RG58 modified
>>(IEEE 802.3). I want to use it to connect my 300 ohm TV dipole
>>antenna in my attic to my HDTV in the basement. And, of course, I
>>would need a 50 ohm to 75 ohm match at the HDTV.
>> We only watch over-the-air TV. Why? Because I live within 2 miles of
>>three 1000 ft TV towers. In fact, the dipole in the basement works
>>quite well. But I do get dropouts during storms; go figure. I get 17
>>channels for free, so why go cable or FIOS. Nothing worthwhile there
>>
>> So can someone point me to a good site for balun design. I've done
>>the Google searches, but all that I find seem to be for high power
>>applications.
>> Any help would be appreciated.
>> Al
>>
>
>Have you tried the 50 ohm cable directly (with a 4:1 xfmr at the
>dipole) to see how it works? The 300 ohms for the dipole, etc only
>apply at one single frequency and with signals that strong there really
>shouldn't be an issue with additional loss. Reflections will not show
>up visibly with digital tv.
>
>Part of the issue here is winding the balun and set transformer at UHF
>frequencies. Not impossible to do with inexpensive parts (multicore
>ferrites) but I wonder if its really necessary?
>
>GL,

Yes, just go ahead and use a normal 4:1 off-the-shelf TV/FM balun. They
are only a couple of dollars. The effects of the incorrect impedance
transformation will be negligible, and there's little to be gained by
trying for 'perfection'. If it doesn't work, you've lost virtually
nothing. [Note that, if it doesn't work, it won't be because the ratio
is wrong, or that the coax isn't 75 ohms.
--
Ian

677. Re: 6 to 1 balun design

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-18 15:39:49 UTC
From: alchazz <no.spam@wanted.com>
Message-ID: <9jfQl.2062$5F2.1434@nwrddc01.gnilink.net>
Source record: 2780

On Mon, 18 May 2009 16:01:04 +0100, Ian Jackson wrote:

> In message <gurpcm0h8j@news6.newsguy.com>, Bill M
> <radioexray@geemail.com> writes
>>alchazz wrote:
>>> I am looking for a 6 to 1 balun, 300 ohms balanced to 50 ohms coax. I
>>>don't need one that handles transmitter power as I am only using it for
>>>a receiving antenna.
>>> I have on hand several hundred feet of 50 ohm coax, RG58 modified
>>>(IEEE 802.3). I want to use it to connect my 300 ohm TV dipole antenna
>>>in my attic to my HDTV in the basement. And, of course, I would need a
>>>50 ohm to 75 ohm match at the HDTV.
>>> We only watch over-the-air TV. Why? Because I live within 2 miles of
>>>three 1000 ft TV towers. In fact, the dipole in the basement works
>>>quite well. But I do get dropouts during storms; go figure. I get 17
>>>channels for free, so why go cable or FIOS. Nothing worthwhile there
>>>
>>> So can someone point me to a good site for balun design. I've done
>>>the Google searches, but all that I find seem to be for high power
>>>applications.
>>> Any help would be appreciated.
>>> Al
>>>
>>>
>>Have you tried the 50 ohm cable directly (with a 4:1 xfmr at the dipole)
>>to see how it works? The 300 ohms for the dipole, etc only apply at one
>>single frequency and with signals that strong there really shouldn't be
>>an issue with additional loss. Reflections will not show up visibly with
>>digital tv.
>>
>>Part of the issue here is winding the balun and set transformer at UHF
>>frequencies. Not impossible to do with inexpensive parts (multicore
>>ferrites) but I wonder if its really necessary?
>>
>>GL,
>
> Yes, just go ahead and use a normal 4:1 off-the-shelf TV/FM balun. They
> are only a couple of dollars. The effects of the incorrect impedance
> transformation will be negligible, and there's little to be gained by
> trying for 'perfection'. If it doesn't work, you've lost virtually
> nothing. [Note that, if it doesn't work, it won't be because the ratio
> is wrong, or that the coax isn't 75 ohms.

Yes, I thought I might try that. You guys are right. It should not be an
issue at these signal levels. I have a bunch of the 4:1 baluns that I

have gotten from our town's recycling station.

But it is still odd that I get dropouts when I am so close to the towers.

Al

678. Re: 6 to 1 balun design

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-18 16:42:38 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <foXHJHO+$YEKFwT$@g3ohx.demon.co.uk>
Source record: 2781

In message <9jfQl.2062$5F2.1434@nwrddc01.gnilink.net>, alchazz
<no.spam@wanted.com> writes
>On Mon, 18 May 2009 16:01:04 +0100, Ian Jackson wrote:
>
>> In message <gurpcm0h8j@news6.newsguy.com>, Bill M
>> <radioexray@geemail.com> writes
>>>alchazz wrote:
>>>> I am looking for a 6 to 1 balun, 300 ohms balanced to 50 ohms coax. I
>>>>don't need one that handles transmitter power as I am only using it for
>>>>a receiving antenna.
>>>> I have on hand several hundred feet of 50 ohm coax, RG58 modified
>>>>(IEEE 802.3). I want to use it to connect my 300 ohm TV dipole antenna
>>>>in my attic to my HDTV in the basement. And, of course, I would need a
>>>>50 ohm to 75 ohm match at the HDTV.
>>>> We only watch over-the-air TV. Why? Because I live within 2 miles of
>>>>three 1000 ft TV towers. In fact, the dipole in the basement works
>>>>quite well. But I do get dropouts during storms; go figure. I get 17
>>>>channels for free, so why go cable or FIOS. Nothing worthwhile there
>>>>
>>>> So can someone point me to a good site for balun design. I've done
>>>>the Google searches, but all that I find seem to be for high power
>>>>applications.
>>>> Any help would be appreciated.
>>>> Al
>>>>
>>>>
>>>Have you tried the 50 ohm cable directly (with a 4:1 xfmr at the dipole)
>>>to see how it works? The 300 ohms for the dipole, etc only apply at one
>>>single frequency and with signals that strong there really shouldn't be
>>>an issue with additional loss. Reflections will not show up visibly with
>>>digital tv.
>>>
>>>Part of the issue here is winding the balun and set transformer at UHF
>>>frequencies. Not impossible to do with inexpensive parts (multicore
>>>ferrites) but I wonder if its really necessary?
>>>
>>>GL,
>>
>> Yes, just go ahead and use a normal 4:1 off-the-shelf TV/FM balun. They
>> are only a couple of dollars. The effects of the incorrect impedance
>> transformation will be negligible, and there's little to be gained by
>> trying for 'perfection'. If it doesn't work, you've lost virtually
>> nothing. [Note that, if it doesn't work, it won't be because the ratio
>> is wrong, or that the coax isn't 75 ohms.

>
>Yes, I thought I might try that. You guys are right. It should not be an
>issue at these signal levels. I have a bunch of the 4:1 baluns that I
>have gotten from our town's recycling station.
>
>But it is still odd that I get dropouts when I am so close to the towers.
>
That might well be due to multiple off-air reflections. Digital TV isn't
totally immune to the problems these cause (but, of course, you don't
see the reflections like you do on analog TV pictures).

Even if you live in an area of high signal strength, it's often
necessary first to get a clean signal from the antenna, which may need
to be a 'high-gain' design in order to reduce reflections. If you've got
too much signal at the TV set, you can always fit in-line attenuators at
the TV input (fixed barrels or variable 'twiddlers').
--
Ian

679. Re: 6 to 1 balun design

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-19 00:27:09 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <St6dnUaJ8Lgac4zXnZ2dnUVZ_sqdnZ2d@earthlink.com>
Source record: 2782

"alchazz" <no.spam@wanted.com> wrote in message
news:okdQl.1761$wR5.875@nwrddc02.gnilink.net...
>I am looking for a 6 to 1 balun, 300 ohms balanced to 50 ohms coax. I
> don't need one that handles transmitter power as I am only using it for a
> receiving antenna.
>
> I have on hand several hundred feet of 50 ohm coax, RG58 modified (IEEE
> 802.3). I want to use it to connect my 300 ohm TV dipole antenna in my
> attic to my HDTV in the basement. And, of course, I would need a 50 ohm
> to 75 ohm match at the HDTV.
>
> We only watch over-the-air TV. Why? Because I live within 2 miles of
> three 1000 ft TV towers. In fact, the dipole in the basement works quite
> well. But I do get dropouts during storms; go figure. I get 17 channels
> for free, so why go cable or FIOS. Nothing worthwhile there anyway.
>
> So can someone point me to a good site for balun design. I've done the
> Google searches, but all that I find seem to be for high power
> applications.
>
> Any help would be appreciated.
>
> Al
>

I would not worry about the balun for TV reception. Just use the 300 to 70 ohm one. I think you will get a lot of loss with the rg 58 coax. Go to the rg6 type coax for much lower loss.

I have a 2 meter horizontal M2 antenna up 70 feet and when the cable goes out I connect it to my converter box. It is fed with about 130 feet of low loss rg 8 type coax and from there I go to about 25 feet of rg-6 type to get to the TV. I get about 30 channels with this setup. Probably 30 to 50 miles from most of the transmitters.

It is possible the TV signals are overshooting you. Sometimes almost under a tower can be worse than being out several more miles. As someone mentioned you may be getting multible and causing dropouts. I had a 2 meter antenna in the house hooked on the back of a transceiver and people walking around the room would sometimes cause a dropout and they were not in a direct line from the rig to the repeater.

680. Thanks

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-20 17:34:30 UTC
From: Travis <TravisCurrier@gmail.com>
Message-ID: <713529d1-dae3-4e58-990a-39f477e97cd2@o14g2000vbo.googlegroups.com>
Source record: 2783

As a former Engineer I want to take the time to share a very good website to this group. They sale RF & Microwave Products. I don't want to spam this group I just thought you might be interested in my products. I will post sales everyonce in a while for you guys.

Please Visit:

www.RFKings.com

And here is a 20% off coupon to say thanks:

Coupon Code: RFK20SALE

Travis Currier
RF Kings
Phone: 949-276-7378
Email:sales@rfkings.com
Website: www.rfkings.com
Location: Laguna Niguel, CA

681. Re: Thanks

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-20 19:59:36 UTC
From: "Dr. Barry L. Ornitz" <BLOrnitz48@charter.net>
Message-ID: <GiZQl.72958$CN5.15732@newsfe23.iad>
Source record: 2784
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.swap

"RF King" <TravisCurrier@gmail.com> wrote in message
news:411b21aa-8e4a-4a65-ba77-04dfde623864@s21g2000vbb.googlegroups.com...
> As a former Engineer I want to take the time to share a very good
> website to this group. They sale RF & Microwave Products. I don't want
> to spam this group I just thought you might be interested in my
> products. I will post sales everyonce in a while for you guys.
>
> Please Visit:
>
> www.RFKings.com
>
> And here is a 20% off coupon to say thanks:
>
> Coupon Code: RFK20SALE
>
>
> Travis Currier
> RF Kings
> Phone: 949-276-7378
> Email:sales@rfkings.com
> Website: www.rfkings.com
> Location: Laguna Niguel, CA

He may not want to spam the group but he is more than willing to
send spam individually to your email address if he reads it from a
posting. He also sent at least seven other identical postings to
different newsgroups instead of cross posting. The site he
advertises is his. If you get spam, send your complaints to
abuse@hostmysite.com, groups-abuse@google.com,
and to his posting host abuse@cox.net.
The registrar of his site is Godaddy so you might wish to complain
there too. I have already received spam from this jerk before his
Usenet postings were sent.

--
I HATE SPAM !
73, Dr. Barry L. Ornitz WA4VZQ
BLOrnitz48@charter.net

682. Tissot Men's TXL Dress Watch #T60.1.581.52

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-21 07:52:28 UTC
From: Aron@nikole.com
Message-ID: <4a1586c3$0$4897$ec3e2dad@news.usenetmonster.com>
Source record: 2787

Price:$450.00
Image: http://bestdeallocator.info/image.php?id=B000FBVN9G
Best deal: http://bestdeallocator.info/index.php?id=B000FBVN9G

From Tissot, this T-Trend men's watch is rugged and masculine in high performance stainless steel. Handsome satin finished steel case is presented on the emblematic link bracelet in brushed and polished steel. Polished, raised T center links on a satin finished background encircle the bracelet. Fully integrated bezel frames the black dial with silver colored hands, Arabic numeral and baton hour markers. Water resistant.
Complement your most stylish business suits with the modernly styled Tissot TXL men's stainless steel dress watch. This mid-sized watch features a squarish, tank-style watch case (with wide, polished track-like sides) that measures 32mm (1.25 inches) wide. It has a classic black dial face that's accented with silver stick markers, Arabic numerals at the quarter hours, thin silver baton hands (with seconds hand), and a date function at 6 o'clock. The vertical link stainless steel bracelet band is joined by a foldover safety clasp. Other features include a scratch-resistant sapphire crystal and water resistance to 30 meters (99 feet). About Tissot For more than 150 years, Tissot has embodied the innovation and tradition of Swiss watch-making. Based in the Neuchâtel area of the Jura Mountains, in Le Locle, Switzerland, Charles-Félicien Tissot and his son Charles-Emile created the watch making company Tissot in 1853. Whether in the technology of its movements, in the research for special materials or in the very functions of the watch itself, Tissot's engineers and watchmakers have developed pioneering timepieces over the years. A member of the Swatch Group since 1985, Tissot watches are available in over 140 countries around the world. Tissot uses the best movements (from ETA SA Manufacture Horlogère Suisse), the highest quality materials (316L steel, 18K gold, titanium) and scratchproof glasses (sapphire crystal--at least 2500 Vickers). The company's timepieces have also been chosen as official timekeepers for world championships in cycling, motorcycling, fencing and ice hockey.

ACCESSORIES:

Tissot Men's T Race Chronograph Watch
#T90.4.446.51:http://bestdeallocator.info/index.php?id=B000FBVNAK
Tissot Men's T Sport Titanium Watch
#T65.7.581.31:http://bestdeallocator.info/index.php?id=B000FBXRTA
Tissot Men's TXL Dress Watch
#T60.1.581.32:http://bestdeallocator.info/index.php?id=B000FBXRSQ

683. Bulova Women's Frank Lloyd Wright Willits Leather Strap Watch #96L63

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-21 08:13:07 UTC
From: Alverson@kayla.com
Message-ID: <4a158b9a$0$4897$ec3e2dad@news.usenetmonster.com>
Source record: 2788

Price:$135.00
Image: http://bestdeallocator.info/image.php?id=B000FVC4TY
Best deal: http://bestdeallocator.info/index.php?id=B000FVC4TY

This quite unique and very cheap. I like the two level dial artwork. My only complaint is the strap is slack. I suggest installing a nice alligator strap.
I was very pleased when the watch arrived. It was in the original packaging, and it arrived quickly! The watch looks even more fantastic than in the pictures!

Only thing I was disappointed in is that when I opened the original packaging, it completely fell apart in my hands. I would not have cared if the watch were for myself. However, it is a gift, and I didn't expect to be giving someone something where the box fell apart...
I get compliments on this watch all the time even though I have other watches that cost considerably more
Bulova Ladies and Men?s Strap Collection Watch. This Bulova watch features a black leather strap with Willits white enamel dial. Curved crystal with design based on Ward W. Willits House window. Moisture resistant and stainless steel case. This watch is water resistant to 30 meters/100 feet.
Add a uniquely designed conversation piece to your watch collection with this Willits timepiece from Bulova's Frank Lloyd Wright collection. It's based on an art glass design from the prairie-style Willits home in Highland Park, Illinois, constructed in 1901. This distinctively tall rectangular watch case emulates a stained glass window from the front of the residence, and it features a white enamel dial with art deco flourishes. The stainless steel case offers a polished finish and an off-center crown. It's matched with a smoothly supple black leather strap. This precise quartz timepiece also features a scratch-resistant mineral crystal and water resistance to 30 meters (99 feet). Frank Lloyd Wright (1867-1959) is recognized as one of the greatest architects of the twentieth century. Using innovations in design and engineering made possible by newly developed technology and materials, his work heralded a new thinking in architecture, stressing "organic" structures in harmony with their natural surroundings.

ACCESSORIES:

Bulova Marine Star_Watch Watch 98G10:http://bestdeallocator.info/index.php?id=B00021ASA4
Bulova Women's Diamond Accented Calendar Watch
#98R104:http://bestdeallocator.info/index.php?id=B0018AN6SY
Bulova Women's Diamond Accented Calendar Watch
#96R105:http://bestdeallocator.info/index.php?id=B0018AL3XY
Bulova Women's Diamond Accented Watch
#98P102:http://bestdeallocator.info/index.php?id=B0018AL366
Bulova Women's Diamond Accented Watch
#96R103:http://bestdeallocator.info/index.php?id=B0018AJJEE

684. IWC Men's Ingenieur Chronograph AMG Watch #IW372503

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-21 08:29:54 UTC
From: Axtman@lindsay.com
Message-ID: <4a158f89$0$4897$ec3e2dad@news.usenetmonster.com>
Source record: 2789

Price:$7,100.00
Image: http://bestdeallocator.info/image.php?id=B000LGFCRE
Best deal: http://bestdeallocator.info/index.php?id=B000LGFCRE

Titanium case and bracelet. Black chronograph dial. Screw-in crown. Sapphire crystal. Integrated shock-absorbing system. 44-hour power reserve. Case diameter 42.5mm. Titanium folding clasp. Automatic movement. Water resistant at 120 meters (440 feet). IWC Ingenieur Chronograph AMG Titanium Mens Watch 3725-03 / 372503
Understated and classic in design, the Ingenieur line of IWC watches continues the 50-year tradition of simplicity of function and high accuracy in timekeeping. Although there used to be an Ingenieur with a stopwatch function, this titanium model is the first to include a chronograph. It features an automatic 79350 calibre chronograph movement, small seconds hand with stop function and a chronograph with a central seconds hand and 30-minute counter. And since the 4 Hz movement is able to display times to an accuracy of one-eighth of a second, the dial includes an outer tachymeter scale for measuring time over distance. The round case and integrated bracelet band are made from solid titanium, which is nearly 50 percent lighter than steel, but 30 percent stronger. It's also particularly resistant to salt water corrosion, as well as hypo-allergenic--perfect for those with metal allergies. Sublimely designed, this watch integrated the chronograph push buttons into the case and offers a raised bezel with polished highlights and screw-down accents. The black dial offers a patterned center, chrono subdials at the top and bottom, luminous stick markers, small minute indexes, and baton hands (with luminous stripes and seconds hand). Other features include a soft-iron inner case for protection against magnetic fields, anti-reflective sapphire glass crystal, a 31-jewel movement with 28,800 vibrations per hour, 44-hour power reserve, and water resistance to 120 meters (400 feet)--offering protection from accidental splashes as well suitable for swimming, snorkeling, and light recreational diving. An automatic (or self-winding) watch is fitted with a device (rotor) that automatically winds the spring by using the force of gravity. It needs no battery, but it will stop if you have been physically inactive for an extended period of time--as long as you're moving, the watch will stay powered. Swiss watchmaker Abraham-Louis Perrelet invented the self-winding mechanism in 1770. It worked on the same principle as a modern pedometer, and was designed to wind as the owner walked. About IWC While founded in Schaffhausen, Switzerland in 1868, the International Watch Company (IWC) was created by an American--Florentine Ariosto Jones. The Jones calibre, the very first movement manufactured by IWC contained a wealth of advanced technical features. These included an elongated index to regulate the balance hairspring and a bimetallic cut balance to compensate for fluctuations in temperature. In 2000, IWC introduced the 5000 calibre, a new automatic mechanical movement with a seven-day power reserve and the legendary winding mechanism of the patented Pellaton system. In the aftermath of World War II, IWC became a company of international scope. Exports to the United States increased and the brand became best known for its specialty watches (now highly prized as collectibles), such as the Mark XI and Ingenieur--the first automatic IWC with a soft-iron inner case that protected the movement against magnetic fields.

ACCESSORIES:

IWC Men's Ingenieur Chronograph Watch
#IW372501:http://bestdeallocator.info/index.php?id=B000LGG3V8
IWC Men's Ingenieur Chronograph AMG Watch
#IW372504:http://bestdeallocator.info/index.php?id=B000LGHXFI
IWC Men's Pilot's Mark XV Spitfire Watch
#IW325312:http://bestdeallocator.info/index.php?id=B000LGG3Q8
IWC Men's GST Chrono-Rattrapante Watch
#IW371523:http://bestdeallocator.info/index.php?id=B000LGDD66

685. Re: 6 to 1 balun design

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-21 11:12:39 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <23e7f201-0ee0-4da7-80aa-7a60a46c8b5f@z8g2000prd.googlegroups.com>
Source record: 2785

Hey OM:
A 3:1 mismatch you only lose 25% of the power. And that's power not voltage. So with 50 to 75 ohms you are not going to lose much. And you need plenty of signal so there won't be any pixelization. And if you don't use a balun at all: you have the shield of your coax as an antenna too. I say connect direct and forget about it.

There's only 2 possibles; either you don't get enough signal or you do. Those are better odds than the lottery.

73 OM
de n8zu

686. Re: 6 to 1 balun design

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-21 12:17:39 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <U3h1uyAjZUFKFwai@g3ohx.demon.co.uk>
Source record: 2786

In message
<23e7f201-0ee0-4da7-80aa-7a60a46c8b5f@z8g2000prd.googlegroups.com>,
raypsi <RBorowiak@gmail.com> writes
>Hey OM:
> A 3:1 mismatch you only lose 25% of the power. And that's power not
>voltage.

Where does the 3:1 SWR come from? With the off-the-shelf $2 300:75 ohm
balun, connected to a 50 ohm feeder, the mismatch will be only 1.5:1.

>So with 50 to 75 ohms you are not going to lose much.

Exactly.

>And you
>need plenty of signal so there won't be any pixelization.

>And if you
>don't use a balun at all: you have the shield of your coax as an
>antenna too.

Arrrrrhg!!!!. That's NOT a situation you want to have!

>I say connect direct and forget about it.
>
And I say FIT IT and forget about it! It's so easy to do things
'properly'.

>There's only 2 possibles; either you don't get enough signal or you
>do. Those are better odds than the lottery.
>
You're correct about this bit!
--
Ian

687. Re: 6 to 1 balun design

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-22 00:08:40 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <a4KdndaikcMtQ4jXnZ2dnUVZ_sednZ2d@earthlink.com>
Source record: 2792

"Ian Jackson" <ianREMOVETHISjackson@g3ohx.demon.co.uk> wrote in message
news:U3h1uyAjZUFKFwai@g3ohx.demon.co.uk...
> In message
> <23e7f201-0ee0-4da7-80aa-7a60a46c8b5f@z8g2000prd.googlegroups.com>, raypsi
> <RBorowiak@gmail.com> writes
>>Hey OM:
>> A 3:1 mismatch you only lose 25% of the power. And that's power not
>>voltage.
>
> Where does the 3:1 SWR come from? With the off-the-shelf $2 300:75 ohm
> balun, connected to a 50 ohm feeder, the mismatch will be only 1.5:1.
>

A 3:1 swr does not really equate to a 25% power loss. I think it was the
ARRL that published a chart that at first glance may make it look like
that.

688. 2-1/2" Dust Collection Hose Splicer

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-22 01:00:54 UTC
From: Addeo@georgeanna.com
Message-ID: <4a1677c3$0$4905$ec3e2dad@news.usenetmonster.com>
Source record: 2797

Price:$3.29
Image: http://megadealfinder.info/image.php?id=B001DSZZUI
Best deal: http://megadealfinder.info/index.php?id=B001DSZZUI

Splicer units are used to connect full sections of hose for longer runs or to utilize short sections. Available for both 2-1/2" and 4" hose.

689. Hoover S1156 Sidewinder Hand Vac, Metallic Gold

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-22 01:01:32 UTC
From: Appolonia@mona.com
Message-ID: <4a15cf33$0$4900$ec3e2dad@news.usenetmonster.com>
Source record: 2791

List Price:$40.00
Image: http://bestdeallocator.info/image.php?id=B0000DASAK
Best price found: http://bestdeallocator.info/index.php?id=B0000DASAK

The Hoover S1156 Sidewinder hand vac is easy to handle, has great suction, and not overly noisy (unlike the Dirt Devil it replaced which was noisy and did a poor job of getting up dirt.) Used in my automobile. Cleaned seats beautifully and was strong enough to get grit, sand and small stones off the floor.
I have a great dog that sheds and this vac is fantastic picking up all fur off wood floors and carpeting. Thank the Fur Gods! at Hoover
I love this hand vac. I have used many different ones over the years but this is by far the best. I have two dogs and it works wonders on getting up the dog hair. It makes cleaning easier. I have not found any problems with it at all. You can't go wrong with this purchase.
I purchased the Hoover Sidewinder a little over a month ago and it never ceases to impress me. I had originally bought it to take care of the cat hair on my dark blue furniture (which made it look like I had NO cats afterward) but then I used it to vacuum my area rugs, once again they look like new. Finally a few days ago I decided to use it to Vacuum my car and could not believe how great it did! The swiveling head makes getting into nooks and crannies a breeze, it has a long cord so you don't have to move to a different outlet every few feet and the rotating brush picks up the toughest of pet hair. No disappointments here and the price was very reasonable.
I liked this vac, as soon as we fired it up... great suction, and the beater brushes worked great picking the crud up off the carpet, or the furniture. However, much like the Dirt Devil hand vacs, they have a very poor design using a belt-driven beater brush, which is very prone to problems when hair gets around it, and when the belt warms up. The belt stretches out, and that with any hair on the brush, creates too much friction, preventing the brush from spinning. Someone needs to design something a little better to keep the brushes spinning. Or a better belt drive... something with a little strength to it... and not so prone to stretching. I ended up 'fattening up' the drive post that the belt goes around, with a little duct tape, which seems to have taken up the slip that the stretching caused. This got the vac back working like new... and it really did a great job cleaning. I do like the removeable / reusable bag much better than the Dirt Devil's cheap paper bag inserts.
A Versatile Hand Vac for Home & Shop - Exclusive 90" Swivel Nozzle - Powered Brush Roll - Bagless Design - E-Z Empty Dirt Cup - Washable Filter - 20' Power Cord
Sturdy as a belt sander, the Sidewinder Hand Vac is an all-purpose household tool with a cleverly helpful feature--a nozzle that swivels 90 degrees to provide more flexibility in vacuuming hard-to-reach spots. This is helpful in vacuuming out tricky spaces, such as between moldings and doorjambs, or the concavities of recessed windows. The Sidewinder also has a powered brush roll, especially useful on rugs or fabrics. The Sidewinder has a 20-foot power cord, a workable length for most any household room. The body of the hand vacuum is made of sturdy glitter-gold plastic, and the transparent collector receptacle end is a darker, smoky-gray in color. Its removable filter is made of a long-life, washable

plastic weave. The ergonomically molded handle is designed so that the on/off button is in a comfortable position to be used with one hand. Cleaning the Sidewinder Hand Vac is very easy. The collector cup detaches for easy emptying, and the filter is removable and can be washed in warm, soapy water. (The filter should be entirely dry before being replaced in the vacuum cleaner.) The motor/handle section is not immersible, and it is not advisable to put any of the components in the dishwasher. The Sidewinder measures 13 by 6 by 8-1/4 inches. Hoover products include a one-year warranty against defects and come with a detailed instruction booklet. --Garland Withers

SIMILAR PRODUCTS:

Eureka 71B Hand-Held Vacuum:http://bestdeallocator.info/index.php?id=B0006HUYGM
Hoover S2220 Flair Bagless Upright Stick Vacuum with Power
Nozzle:http://bestdeallocator.info/index.php?id=B00020BQGK
Hoover S1120 Hand Held Wet/Dry Hand Vacuum
Cleaner:http://bestdeallocator.info/index.php?id=B000981H6O
Panasonic ES2206AC Rechargeable Ladies Wet/Dry
Shaver:http://bestdeallocator.info/index.php?id=B0002D5Y60
Presto 05420 FryDaddy Electric Deep
Fryer:http://bestdeallocator.info/index.php?id=B00005KB37

690. High-Speed Rotary Tool SPECIAL OFFER with 100-Piece Accessory Kit!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-22 01:06:39 UTC
From: Alosta@sarai.com
Message-ID: <4a16791b$0$4905$ec3e2dad@news.usenetmonster.com>
Source record: 2798

Price:$89.99
Image: http://discountadvisor.info/image.php?id=B000HRCM0M
Best deal: http://discountadvisor.info/index.php?id=B000HRCM0M

*The ultimate rotary tool and accessory kit - an exceptional value!*Variable speed to 30,000 RPM, powerful 1 Amp long-life motor*INCLUDES 30" flex-shaft pencil grinder and stand - expensive extras with other kits*100-piece accessory kit comes in custom-fit wooden case - keeps bits easy to find*Multiple tools in one; grinder, sander, polisher, drill, rotary saw, cut-off - incredibly versatile!We consider this to be one of the most useful--and most used--tools in our workshop because it does so many different things well. We've used it to sharpen lawnmower and chainsaw blades, buff away rust, cut bolts and screws, sand hard-to-reach corners and make intricate wood cuts. The key to its varied functionality is a powerful 1-amp motor with variable speed up to 30,000 RPM. Includes wide variety of quick-change collets that let you swap functions instantly. For really tight spots the 30" flex-shaft pencil grinder attaches easily to the tool--which then hangs on the included adjustable-height stand. The rotary tool comes with 40 accessories but in this special offer we're including a fantastic 100-piece accessory kit in custom-fit wooden storage and carry case to keep your bits organized and easy to find.

SIMILAR PRODUCTS:

Diamond Burr Set - 1/8", 20Pc:http://discountadvisor.info/index.php?id=B000MOI9G6

691. Porter-Cable PT501 1/2-Inch Pnuematic Impact Wrench

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-22 01:15:42 UTC
From: Aronov@torri.com
Message-ID: <4a167b3a$0$4905$ec3e2dad@news.usenetmonster.com>
Source record: 2799

Price:$132.89
Image: http://megadealfinder.info/image.php?id=B00005R1IB
Best deal: http://megadealfinder.info/index.php?id=B00005R1IB

Works well ,but not as powerful as claimed, I have an old cheapie from harbor freight with 250 lbs of torque, this porter cable is no more powerful than it is.
No power, no torque, you get what you pay for
I'm not brand loyal, I look for the best tool at the best price. I searched the local stores and this tool offered 400 ft/lbs for 79.95. Works great for home/garage use and looks great too.The 20 pc socket set can't be beat for the price either.
Get plenty of control, not to mention power, with the Porter-Cable PT501 1/2-Inch Pneumatic Impact Wrench. This variable-speed impact wrench allows for precise control during use, and its durable pin clutch mechanism ensures years of trouble-free operation. The PT501 displays exceptional power and speed reaching 7,000 RPM, 1,000 BPM, and an incredible 400 ft./lbs. of torque. This compact, 1/2-inch impact wrench manages 4.2 SCFM at 90 PSI, so it's compatible with most air compressors.

SIMILAR PRODUCTS:

Porter-Cable PTA10 12-piece 1/2-Inch Metric Deep Impact Socket Set:http://megadealfinder.info/index.php?id=B000256S5Y
GoodYear 045 3/8-Inch-by-50-Feet Safety Yellow Rubber Hose 3/8 -Inch by 50-Feet 250 PSI With 1/4-Inch Ends:http://megadealfinder.info/index.php?id=B0000225E0
Porter-Cable PTR381 3/8-Inch Pneumatic Ratchet Wrench:http://megadealfinder.info/index.php?id=B00005R1IJ
15pc 1/2" Drive Deep Impact Socket Set (S.A.E.):http://megadealfinder.info/index.php?id=B000FPKXP2

ACCESSORIES:

Milton 728BK M Style Quick Coupler: 1/4-Inch Female Plug:http://megadealfinder.info/index.php?id=B0000225EB
Williams WS-4-11RC 1/2-Inch Drive Impact Socket Set 11-PC:http://megadealfinder.info/index.php?id=B000289344
Hitachi 728530 14-Piece 1/2-Inch 6-Point Impact Socket Set:http://megadealfinder.info/index.php?id=B000256RR8
PUR-Hose PUR-38X100 3/8-Inch X 100 Foot Polyurethane 250 PSI Air Hose:http://megadealfinder.info/index.php?id=B00006700L
PUR-Hose PUR-38X050 3/8-Inch x 50 Foot Polyurethane 250 PSI Air Hose:http://megadealfinder.info/index.php?id=B00006700K

692. Re: 6 to 1 balun design

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-22 04:16:10 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <hf8c15lkcu0q9l4dk2e75pqpsou1jsbhre@4ax.com>
Source record: 2793

On Thu, 21 May 2009 19:08:40 -0500, "Ralph Mowery"
<rmowery28146@earthlink.net> wrote:

>
>A 3:1 swr does not really equate to a 25% power loss. I think it was the
>ARRL that published a chart that at first glance may make it look like
>that.

In a lossless missmatched feeder, part of power is reflected back at each end, while a portion is delivered to the antenna and radiated into space and finally after many reflections most of the power is finally radiated into space.

The localized voltage and current peaks can be an issue both in the feeder or transmitter.

However, with a lossy feeder, some power is attenuated i.e. converted to heat on the initial path to the antenna, also when part of the power is reflected from the mismatch at the antenna, the reflected wave will suffer from the attenuation and again after reflecting from the other end, it will again suffer some attenuation. After several reflections, quite a lot of the initially reflected power is converted to heat.

When looking at the ARRL charts, to get a 25 % or -1.25 dB power loss, the feeder loss when matched would be 0.8 dB and the additional loss due to the 3:1 SWR would be about 0.4 dB.

Paul OH3LWR

693. Re: 6 to 1 balun design

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-22 07:36:08 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <M2jjOqBoXlFKFwJg@g3ohx.demon.co.uk>
Source record: 2794

In message <hf8c15lkcu0q9l4dk2e75pqpsou1jsbhre@4ax.com>, Paul Keinanen
<keinanen@sci.fi> writes
>On Thu, 21 May 2009 19:08:40 -0500, "Ralph Mowery"
><rmowery28146@earthlink.net> wrote:
>
>>
>>A 3:1 swr does not really equate to a 25% power loss. I think it was the
>>ARRL that published a chart that at first glance may make it look like
>>that.
>
>In a lossless missmatched feeder, part of power is reflected back at
>each end, while a portion is delivered to the antenna and radiated
>into space and finally after many reflections most of the power is
>finally radiated into space.
>
>The localized voltage and current peaks can be an issue both in the
>feeder or transmitter.
>
>However, with a lossy feeder, some power is attenuated i.e. converted
>to heat on the initial path to the antenna, also when part of the
>power is reflected from the mismatch at the antenna, the reflected
>wave will suffer from the attenuation and again after reflecting from
>the other end, it will again suffer some attenuation. After several
>reflections, quite a lot of the initially reflected power is converted
>to heat.
>
>When looking at the ARRL charts, to get a 25 % or -1.25 dB power loss,
>the feeder loss when matched would be 0.8 dB and the additional loss
>due to the 3:1 SWR would be about 0.4 dB.
>
But where has this mythical "3:1" SWR come from? I can't see what it has
to do with connecting a 300 ohm antenna (in the attic, and with or
without a matching transformer / balun) to a long run of 50 ohm coax
which eventually connects to a 75 ohm TV set (in the basement). I've
obviously missed something. Please would somebody explain!
--
Ian

694. Clarion VX709 7-Inch 2-DIN Mulitmedia Station with Touch Panel Control and USB Port

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-22 07:50:06 UTC
From: Abugn@ruthe.com
Message-ID: <4a16d7aa$0$4897$ec3e2dad@news.usenetmonster.com>
Source record: 2800

Price:$999.99
Image: http:///image.php?id=B001OQGDIM
Best deal: http:///index.php?id=B001OQGDIM

7¿ Touch Screen LCD Monitor ¿Black Box¿ Navigation Ready (NP509 and CCB509 Sold Separately)or NAX980HD Ready (1) Composite Audio/Video Input Rear Vision Composite Camera Input Soil Resistant Touch Screen Control Panel - CD/MP3/WMA/DVD/DivX Playback Built-in Bluetooth Interface with Internal Microphone Rear USB Port with iPod Direct Connect iPod Audio/Video Control (CCA723 Sold Separately) 200 Watts (50 Watts X 4) 6 Channel / 2 Volt RCA Output High and Low Pass Filters Beat EQ, Magna Bass EX 2 Zone Entertainment (Dedicated A/V Output) XM Satellite Radio Mini-Tuner Ready OEM Steering Wheel Remote.

SIMILAR PRODUCTS:

Clarion CCA723 iPod Audio Control/Video Playback Interface Cable for MAX685BT, VRX785BT:http:///index.php?id=B0017KTW0G
Clarion NAX980HD Hard Disk Drive Navigation System with November 2007 Mapping Database:http:///index.php?id=B0019VJ0D2

ACCESSORIES:

Autosound 2000 Disc Three System/Environmental Test CD:http:///index.php?id=B0000009EO
Maxell CD/CD-ROM Scratch Repair Kit:http:///index.php?id=B00000J1E6
DEI Heat Shrink Tubing Black 4-foot length 6-mm diameter:http:///index.php?id=B001PPIF8S
DEI Heat Shrink Tubing Black 4-foot length Assortment:http:///index.php?id=B001PPEX66
DEI Heat Shrink Tubing Black 4-foot length 3-mm diameter:http:///index.php?id=B001PPDO16

695. Magnetic Tool Holder

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-22 11:08:37 UTC
From: Auker@emmie.com
Message-ID: <4a165d71$0$4905$ec3e2dad@news.usenetmonster.com>
Source record: 2795

Price:$17.99
Image: http://discountadvisor.info/image.php?id=B001DSXDLQ
Best deal: http://discountadvisor.info/index.php?id=B001DSXDLQ

Yes, this type of thing works, and might be OK for wrenches or pliers that never get used near electronic equipment. But do not use these for tools that might ever come near a computer, even if you own a degausser. And whatever you do, DO NOT hold edge-tools (like chisels or saws) with a bare metal magnet as shown in the photo.
Magnetic tool holder holds metal tools, keeping them in sight and on hand. No more rummaging through a crowded drawer. Keeps your chisel edges sharp and nick-free. Great for wrenches, chisels, screwdrivers, turning tools and more. 2" Wide X 18" Long.

ACCESSORIES:

Painters Pyramids, 10-Pack:http://discountadvisor.info/index.php?id=B001BM2DFQ
Titebond III Ultimate Wood Glue, 16
oz.:http://discountadvisor.info/index.php?id=B001DSXGKE
Rockler Universal Fence Clamps:http://discountadvisor.info/index.php?id=B001DSZFMG
Titebond III Ultimate Wood Glue, 4 oz.:http://discountadvisor.info/index.php?id=B001DT17LI
Rockler Thin Rip Tablesaw Jig:http://discountadvisor.info/index.php?id=B001DT1VMS

696. Hobart 770129 Oxy/Acet,Goggle - Flip Front- 50mm Eye Cup Shade5

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-22 12:11:30 UTC
From: Ahal@shirley.com
Message-ID: <4a166c2e$0$4905$ec3e2dad@news.usenetmonster.com>
Source record: 2796

Price:$8.99
Image: http://discountadvisor.info/image.php?id=B001FOPXGG
Best deal: http://discountadvisor.info/index.php?id=B001FOPXGG

Okay, there are two groups of folks looking at this item, Steampunk costume folks and welders.

For the welders:
- Well built, inexpensive
- Both the clear and shaded glass were flat and well-attached
- The ventilation on the goggles was especially good

For the steampunk folks:
- The googles themselves are rubber-plastic, would need decoration
- Strap is decidedly modern looking
- There is (safety) text on the lenses
- Look pretty good and are cheap

SIMILAR PRODUCTS:

Dr. Horrible's Sing-Along Blog:http://discountadvisor.info/index.php?id=B001M5UDGS
Hobart 770096 Welding Oxy-Acetylene Goggle - 50mm Eye
Cup:http://discountadvisor.info/index.php?id=B0017Z04SK
Pride and Prejudice and Zombies: The Classic Regency Romance - Now with Ultraviolent Zombie
Mayhem!:http://discountadvisor.info/index.php?id=1594743347
Norcross Safety Size 11 White Pvc Boot 12"
74928-11:http://discountadvisor.info/index.php?id=B000676YXE
US Forge 108 Shaded #5 Economy Cup Brazing
Goggles:http://discountadvisor.info/index.php?id=B0000DD6JC

ACCESSORIES:

Rockwell RK9000 Jawhorse:http://discountadvisor.info/index.php?id=B0018MRUN4

697. Bissell 3106A Featherweight Lightweight Vacuum

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-22 12:41:01 UTC
From: Amela@flossie.com
Message-ID: <4a15ca64$0$4900$ec3e2dad@news.usenetmonster.com>
Source record: 2790

List Price:$24.99
Image: http://bestdeallocator.info/image.php?id=B00008NRU0
Best price found: http://bestdeallocator.info/index.php?id=B00008NRU0

I needed something lightweight to pick up the debris my dogs track in and leave on the hardwood and vinyl flooring downstairs. This is perfect for the purpose. And it's easy to empty. It performs much less well on carpet, but I have a standard vaccum for that. So I'm happy.
This works great on tile floors. The suction has a lot of power and it glides easily, also very lightweight which makes it all faster. Very handy to also be able to quickly pull the bottom rolling part off and have an instant hand vac to fit into crevices and small spaces. The filter cup opens very easily, dumps quick, and the filter itself is easily brushed off. Every other week or so I take the filter off and rinse it with some soap and water and then let it air dry. Its very easy to do as the durable white filter rotates on and off easily. Sometimes I also add a few drops of my favorite essential oil into the dirt cup after I've emptied it and then when I vacuum my home has the wonderful aroma of the scented oil and it doesn't seem to hurt the plastic or the vacuum in any way! I use 100% pure organic essential oils in it though so I don't know if any other type of artificial or synthetic fragrance oils would work as well.
My last one of these stick vacs quit working after about 10 months of a lot of use, the motor stopped but for the low price that is no problem for me. But my local discount superstore stopped selling this brand and is selling an inferior brand that I already tried and returned. So glad that Amazon is selling these and with free shipping too!
These are really handy for a laundry room, small apartment, an RV, garage and anywhere you need speed vacuuming. Probably not the best for high pile carpet but excellent for low pile carpet, linoleum and tile and can also be used as your car vacuum!
I usually don't write reviews, but I had to for this one!! Because it's so not fair not to write anything about such a wonderful product. I use it for my wood floors and also carpets, works like a charm!! Works better than all those expensive vaccums
Does very well. Have a question. Is it alright to connect this to an extension cord? Cord that is with vac. toooooo short.
This works very well on our tile floors. I imagine that it would work just as well on any hard surface. It's not as easy to move on our carpet, but the hand-held vac on a stick is still great on carpets!
Bissell Featherweight Lightweight Vacuum
A remarkably lightweight cleaning unit, the Featherweight stick vacuum from Bissell offers dual functionality in one slim little machine. Suitable for bare floors, draperies, upholstery, and low-pile carpets, the Featherweight converts easily from a floor vacuum to a hand vacuum and includes a crevice tool for tight corners. Completely bagless, the unit collects debris in a dust cup with a washable cloth filter. When the cup fills up, you just pop it off and empty it. Handy for small areas or anyone who needs a lightweight cleaning tool, the Featherweight stands 44-1/2 inches high and has a 9-1/4-inch nozzle. It comes with an ergonomically designed grip, and Bissell includes a limited one-year warranty.
--Emily Bedard

SIMILAR PRODUCTS:

Bissell 32045 Vacuum Cleaner Filter (2 pack):http://bestdeallocator.info/index.php?id=B000FK9CBI
Bissell 1867-7 Steam Mop Hard-Floor Cleaner, Green Tea:http://bestdeallocator.info/index.php?id=B000RPVHZU
Proctor Silex K2070H 1-Quart Automatic Electric Kettle, White:http://bestdeallocator.info/index.php?id=B00023XCWS
Bissell 3255 Steam Mop Microfiber Pad Replacement, 2 Pack:http://bestdeallocator.info/index.php?id=B000RPTVAS
Pyrex Storage 10-Piece Set, Clear with Blue Lids:http://bestdeallocator.info/index.php?id=B00005B8K5

698. Re: Free "lofer" Radio Scrap Books

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-23 03:14:34 UTC
From: Myron <Myron.45d2d4d@radiobanter.com>
Message-ID: <Myron.45d2d4d@radiobanter.com>
Source record: 2601

Myron A. Calhoun;672124 Wrote:
> I'm finally admitting there are some interesting aspects of radio that
> I'm not going to live long enough to get around to, so I'll send the
> following ...:
> The low and medium frequency radio scrap book
> Addendum '77/'78 for thr low and medium radio....
> both "From the Editors of ham radio/Ken Cornell, W2IMB"
> ...snip...

I'm happy to say that the above have been taken!
--W0PBV

--
Myron

699. Uncle Ruport Is back in the news

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-23 18:17:16 UTC
From: joeturn <joeturn2000@yahoo.com>
Message-ID: <f4d8acd9-21e8-4d06-a8c9-95122f9cf2e9@s31g2000vbp.googlegroups.com>
Source record: 2602

The Nagravision3 Farse Exposed

Uncle Ruport has been a schewd Sat Pirate. His many names were 2old 4this,dexter,squeem well he told me he had 8 guys keeping his 450 pirate sites updated with new files! Nagravision was never hacked it was simply furnished by him to his pirate sat sites to make his goal of owning the satellite empire!

He did so with finess ,after purchasing AT&T he put his oldest son in biz with AT&Tamp and sent him back to Australia,
because of his religous convoctions!
His yougest son Sir James was pulled out of law school at Harvard to fill the void and put in command of NDS.This gave Uncle Ruport free time to exploit the North American market.After becoming an American citizen Uncle Ruport was allowed to buy DTV.
After Uncle Ruport dominated the Satellite biz he started to dabble in the internet of which he owns or has control of everything that goes on his World Wide Webb of deception including microsoft !!

His pirate shops have came a long way from selling timed released files and cards to having a controling interest in FTA/DVB compatible STBs.
His interest in Thompson Electronics and their ability to provide hardware to suit his fancy was merely the tip of the iceburg.He phased the DTV hack out of biz and blamed it on a change in their encryption..This was not reality just technobabble.

Nagravision has never changed to NAG 2 nor
NAG3 because the encrytion was never a danger to satellite PTV. After buying and selling DTV to John Malone there was a binding agreement not to release DTV/DSS files or else he would have to pay dearly.His plea agreement with Canal Plus has given John Malone the upper hand. The pirates dont know what went on they just swallowed the new encryption farse!

Now Uncle Ruport is full speed ahead now with pushing IKS /DVB boxes .However he has to phase out his so called NAG2..Which is nothing more than dissabling the ppv channels in his files and blaming it on the new NAG 3 farse.
During this dissabling of channels on the current STBs and still offering them on his IKS connection has sent the pirates into a buying freenzy.
His IKS is florishing out of control$$$ He has gone as for as to delete the old files ,back when all the channels were included.So smart people wont realize how he is pushing his IKS connection.
However there is a few that has realized what he was up to and has a

stache of old files to fall back on!

and the show goes on

Wheres My $5mil UNK ?

700. Re: Linear Amplifier Plans 1-16 Pill On DVD

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-26 02:26:11 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <a9c9d1f1-38b6-412c-ac2c-1a351959a2b9@d19g2000prh.googlegroups.com>
Source record: 2603
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On May 15, 5:00 pm, "Roger & Suzanne Nair" <r&sn...@lycos.com> wrote:
> "KD8IMG, Robert Trendel, is a twice convicted stalker of women."<mopeyzakw...@yahoo.com>
wrote in message

Hey OM

He's got a heck of a tower if you looky at this street view here:
http://tinyurl.com/pw6fyl
And a gr8t privacy fence.

73 OM
de n8zu

701. Re: Linear Amplifier Plans 1-16 Pill On DVD

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-26 02:32:01 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <01d627ca-7c8c-4eda-a243-c449ed34ca9c@d2g2000pra.googlegroups.com>
Source record: 2604
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On May 15, 7:08 pm, "Dan Valdez" <dv...@yahoo.com> wrote:
> "Roger & Suzanne Nair" <r&sn...@lycos.com> wrote in
messagenews:gukl5rbqb2@news.mixmin.net...

>
> Is kc8qjp out of prison again?-

Hey OM

She lives in the same area zip code looky the street view a real flag
waver here:
http://tinyurl.com/qnaxzn

73 OM
de n8zu

702. Transceiver mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-26 23:51:00 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <53d65d2e-49fd-4852-9695-e5389b985f3c@r33g2000yqn.googlegroups.com>
Source record: 2605

I have an HF transceiver which can be easily modified to work outside
the ham bands. I want to perform the mod so I can use the radio with
VHF/UHF transverters and cover the entire bands. Would this be legal?
I have discussed this with several fellow hams but have not really got
any kind of definitive answer yet.

Jimmie.

703. Re: Transceiver mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-27 00:25:14 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <50cb4682-a6b2-494d-94e7-b1b857303d97@m19g2000yqk.googlegroups.com>
Source record: 2606

On May 26, 4:51 pm, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> I have an HF transceiver which can be easily modified to work outside
> the ham bands. I want to perform the mod so I can use the radio with
> VHF/UHF transverters and cover the entire bands. Would this be legal?
> I have discussed this with several fellow hams but have not really got
> any kind of definitive answer yet.
>
> Jimmie.

Assuming you're in a country where the governing agency lets hams build their own equipment for operation on ham bands, what could possibly be wrong with it? So long as you use modes, powers and frequencies for which you're licensed, and you transmit an appropriately clean signal, who's going to have any problem? You could, of course, get into trouble quickly if you transmit a signal on frequencies you're not licensed to use. Where I am, at least, I can legally build RF power generating equipment for any frequency I want, so long as I don't use it to transmit unauthorized signals. (My RF signal generator is capable of putting out enough power to get me into trouble all the way from kHz to several GHz if I connect it to an antenna, but that's not what I use it for. I've even been using it with a broadband 100 watt amplifier lately, and I'm not at all worried about the legalities, since the power goes into a dummy load where it's turned to heat.)

Cheers,
Tom

704. Re: Transceiver mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-27 00:30:02 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <4bdue6-fn4.ln1@mail.specsol.com>
Source record: 2607

JIMMIE <JIMMIEDEE123@yahoo.com> wrote:
> I have an HF transceiver which can be easily modified to work outside
> the ham bands. I want to perform the mod so I can use the radio with
> VHF/UHF transverters and cover the entire bands. Would this be legal?
> I have discussed this with several fellow hams but have not really got
> any kind of definitive answer yet.
>
> Jimmie.

As a licensed amateur (I'm assuming US), you can do anything you want
with your equipment as long as you don't transmit outside of the
frequencies and modes authorized by your class of license.

--
Jim Pennino

Remove .spam.sux to reply.

705. Re: Transceiver mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-27 01:24:09 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <8e14c33f-91c6-44f0-9ce4-2a6c8e587ff1@m19g2000yqk.googlegroups.com>
Source record: 2608

On May 26, 8:30 pm, j...@specsol.spam.sux.com wrote:
> JIMMIE <JIMMIEDEE...@yahoo.com> wrote:
> > I have an HF transceiver which can be easily modified to work outside
> > the ham bands. I want to perform the mod so I can use the radio with
> > VHF/UHF transverters and cover the entire bands. Would this be legal?
> > I have discussed this with several fellow hams but have not really got
> > any kind of definitive answer yet.
>
> > Jimmie.
>
> As a licensed amateur (I'm assuming US), you can do anything you want
> with your equipment as long as you don't transmit outside of the
> frequencies and modes authorized by your class of license.
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

Thanks Tom and Jim, It was also my reasoning that if I could build my own transmitter and operate it surely modifying equipment would be legal as long as I did not transmit outside the bands. The radio is an Icom and I use software thst I wrote to control the frequency/mode. It would not be too difficult to modify the software to limit the frequency data sent to the transceiver in accordance with the band I am using. The software already "knows" when I use the transverters so I get the proper frequency dispaly. As the XYL and YL may be using it some goof proofing may be in order. Hopefully soon I will also have the computer controling the switching of the transverters.

Jimmie

706. Re: Transceiver mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-27 02:35:45 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <hfGdnXxJPYk4BYHXnZ2dnUVZ_s2dnZ2d@earthlink.com>
Source record: 2609

"JIMMIE" <JIMMIEDEE123@YAHOO.COM> wrote in message
news:53d65d2e-49fd-4852-9695-e5389b985f3c@r33g2000yqn.googlegroups.com...
>I have an HF transceiver which can be easily modified to work outside
> the ham bands. I want to perform the mod so I can use the radio with
> VHF/UHF transverters and cover the entire bands. Would this be legal?
> I have discussed this with several fellow hams but have not really got
> any kind of definitive answer yet.
>
> Jimmie.

This is the basic way many transceivers have worked for many years. The basic signal generating part is almost never on the same frequency as the desired output.

As mentioned by others assuming you are in the US anyway it does not mater what you do to generate the output frequency as long as the final results are in the ham band and meets the other requirements.

707. Re: Transceiver mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-27 10:15:55 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <y7Kdnbbn0M5Bj4DXnZ2dnUVZ_r6dnZ2d@bright.net>
Source record: 2610

JIMMIE wrote:
> I have an HF transceiver which can be easily modified to work outside
> the ham bands. I want to perform the mod so I can use the radio with
> VHF/UHF transverters and cover the entire bands. Would this be legal?
> I have discussed this with several fellow hams but have not really got
> any kind of definitive answer yet.
>
> Jimmie.

Assuming you are a licensed ham, it is perfectly legal...IF...you do not transmit over the air on a frequency that is NOT authorized. With transverters, the RF coming out of the HF transceiver goes into the transverter on a coax cable. It is not going out over the air. The transverter output must be filtered enough to only pass the desired signal and must reduce harmonics and spurious emissions (of which your IF frequency could be considered a spurious emission).

708. test

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-27 13:15:56 UTC
From: Howard Kowall <hkowall@shaw.ca>
Message-ID: <h2bTl.117664$5N7.107788@newsfe09.iad>
Source record: 2611

sorry test only

709. Re: Transceiver mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-27 18:46:57 UTC
From: JB <nospam@goofball.net>
Message-ID: <BUfTl.861$Cc1.158@nwrddc01.gnilink.net>
Source record: 2612

"JIMMIE" <JIMMIEDEE123@YAHOO.COM> wrote in message
news:8e14c33f-91c6-44f0-9ce4-2a6c8e587ff1@m19g2000yqk.googlegroups.com...
On May 26, 8:30 pm, j...@specsol.spam.sux.com wrote:
> JIMMIE <JIMMIEDEE...@yahoo.com> wrote:
> > I have an HF transceiver which can be easily modified to work outside
> > the ham bands. I want to perform the mod so I can use the radio with
> > VHF/UHF transverters and cover the entire bands. Would this be legal?
> > I have discussed this with several fellow hams but have not really got
> > any kind of definitive answer yet.
>
> > Jimmie.
>
> As a licensed amateur (I'm assuming US), you can do anything you want
> with your equipment as long as you don't transmit outside of the
> frequencies and modes authorized by your class of license.
>
> --
> Jim Pennino
>
> Remove .spam.sux to reply.

>Thanks Tom and Jim, It was also my reasoning that if I could build my
own transmitter and operate it surely modifying equipment would be
legal as long as I did not transmit outside the bands. The radio is
an Icom and I use software thst I wrote to control the frequency/mode.
It would not be too difficult to modify the software to limit the
frequency data sent to the transceiver in accordance with the band I
am using. The software already "knows" when I use the transverters so
I get the proper frequency dispaly. As the XYL and YL may be using it
some goof proofing may be in order. Hopefully soon I will also have
the computer controling the switching of the transverters.

>Jimmie

The spectral purity specifications in part 97. Most HF rigs have allowed
some out of band operation ever since I could remember. It is the shared
responsibility of the station licensee and control ops to stay cleanly
within their grant. Regular RG 58c provides at least 60db of isolation from
adjacent cabling. Be aware of the possibilities of what might come out of
the antenna ports and take appropriate action. If you waste a little power
in an attenuator and/ or filter circuit on the input of the Xverter,
spurious from the driving radio are also reduced. Nice to be able to verify
with a spectrum analyzer too if you know someone. GL

710. Re: Transceiver mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-28 00:35:35 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <18f74751-d1d1-4cb3-b0d2-deead7a58fa6@37g2000yqp.googlegroups.com>
Source record: 2613

On May 27, 2:46 pm, "JB" <nos...@goofball.net> wrote:
> "JIMMIE" <JIMMIEDEE...@YAHOO.COM> wrote in message
>
> news:8e14c33f-91c6-44f0-9ce4-2a6c8e587ff1@m19g2000yqk.googlegroups.com...
> On May 26, 8:30 pm, j...@specsol.spam.sux.com wrote:
>
>
>
>
>
> > JIMMIE <JIMMIEDEE...@yahoo.com> wrote:
> > > I have an HF transceiver which can be easily modified to work outside
> > > the ham bands. I want to perform the mod so I can use the radio with
> > > VHF/UHF transverters and cover the entire bands. Would this be legal?
> > > I have discussed this with several fellow hams but have not really got
> > > any kind of definitive answer yet.
>
> > > Jimmie.
>
> > As a licensed amateur (I'm assuming US), you can do anything you want
> > with your equipment as long as you don't transmit outside of the
> > frequencies and modes authorized by your class of license.
>
> > --
> > Jim Pennino
>
> > Remove .spam.sux to reply.
> >Thanks Tom and Jim, It was also my reasoning that if I could build my
>
> own transmitter and operate it surely modifying equipment would be
> legal as long as I did not transmit outside the bands. The radio is
> an Icom and I use software thst I wrote to control the frequency/mode.
> It would not be too difficult to modify the software to limit the
> frequency data sent to the transceiver in accordance with the band I
> am using. The software already "knows" when I use the transverters so
> I get the proper frequency dispaly. As the XYL and YL may be using it
> some goof proofing may be in order. Hopefully soon I will also have
> the computer controling the switching of the transverters.
>
> >Jimmie
>
> The spectral purity specifications in part 97. Most HF rigs have allowed
> some out of band operation ever since I could remember. It is the shared
> responsibility of the station licensee and control ops to stay cleanly

> within their grant. Regular RG 58c provides at least 60db of isolation from
> adjacent cabling. Be aware of the possibilities of what might come out of
> the antenna ports and take appropriate action. If you waste a little power
> in an attenuator and/ or filter circuit on the input of the Xverter,
> spurious from the driving radio are also reduced. Nice to be able to verify
> with a spectrum analyzer too if you know someone. GL- Hide quoted text -
>
> - Show quoted text -

I did the mod today and it certainly is nice to be able to work the
whole 2M band AM/FM/SSB and CW. I still have to do some cabling when I
go from HF to VHF or vice versa I have some really good coaxial relays
that I could soon rig up to operate manually and hopefully controled
by the PC in the more distant future. The transverter I have was set
up for use with a 10M IF however if I could modify it for a 6M IF
things would be greatly simplified as the transceiver covers 6M at
reduce power(10 watts) compared to 100 watts on HF.

Jimmie

711. New Book about Radio and Electronics

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-28 03:01:55 UTC
From: "bill.meara@gmail.com" <bill.meara@gmail.com>
Message-ID: <34a0a514-114b-4fe2-977b-fd5e8f91b264@h11g2000yqb.googlegroups.com>
Source record: 2614
Cross-posted to: sci.electronics.basics,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

SolderSmoke -- A Global Adventure in Radio Electronics
From Crystal Radios to Podcast MP3s
With Occasional Forays into Astronomy, Kite Aerial Photography, and
Model Rocketry

SolderSmoke is the story of a secret, round-the-world, after-hours
life in electronics. Bill Meara started out as a normal kid, but
around the age of 12 he got interested in radio... To make matters
worse, when he got older he became a diplomat. In all of the places he
has lived, his hobby caused him to seek out like-minded radio fiends,
to stay up late into the night working on strange projects, and to
build embarrassingly large antennas above innocent foreign
neighborhoods. SolderSmoke takes you into the world of an expatriate
geek. It is a technical memoir filled with funny stories and with
serious descriptions of Bill's struggles to truly understand the
theory behind the equipment that he built.

My intention was to produce a book that is both fun and useful. The
memoir part of the book is about my life as electronics-addicted
diplomat. But this is more than a memoir: portions of each chapter
describe my struggles to really understand the theory behind the
circuits that I was building. Throughout, I try to lace the text with
inspirational descriptions of the fraternal, cooperative,
international aspects of ham radio, of what we call "The International
Brotherhood of Electronic Wizards." In short, its the kind of book
that a techie would like to take to the beach.

Here is the web site -- it has the cover photo and a preview of the
first chapter.

http://www.lulu.com/content/paperback-book/soldersmoke/6743576

712. Re: test

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-28 15:49:23 UTC
From: Bob <Invalid@Invalid.inv>
Message-ID: <787q43F1kdbkcU1@mid.individual.net>
Source record: 2615

Howard Kowall wrote:

> sorry test only

Since there are /several/ test newsgroups, we can only presume that your
"test" failed, since it showed up here...!

713. Re: Linear Amplifier Plans 1-16 Pill On DVD

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-28 16:09:39 UTC
From: Dan Valdez <dval5@yahoo.com>
Message-ID: <4a1eb74c$1@x-privat.org>
Source record: 2616
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

"raypsi" <RBorowiak@gmail.com> wrote in message
news:01d627ca-7c8c-4eda-a243-c449ed34ca9c@d2g2000pra.googlegroups.com...
On May 15, 7:08 pm, "Dan Valdez" <dv...@yahoo.com> wrote:
> "Roger & Suzanne Nair" <r&sn...@lycos.com> wrote in
> messagenews:gukl5rbqb2@news.mixmin.net...

>
> Is kc8qjp out of prison again?-

Hey OM

She lives in the same area zip code looky the street view a real flag
waver here:
http://tinyurl.com/qnaxzn

73 OM
de n8zu

==========

It would appear her reputation has been soiled by N8WWM..

http://www.google.com/search?hl=en&q=kc8qjp&btnG=Google+Search&aq=f&oq=&aqi=

714. Re: Transceiver mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-28 16:58:57 UTC
From: JB <nospam@goofball.net>
Message-ID: <lpzTl.1098$Cc1.481@nwrddc01.gnilink.net>
Source record: 2617

"JIMMIE" <JIMMIEDEE123@YAHOO.COM> wrote in message
news:18f74751-d1d1-4cb3-b0d2-deead7a58fa6@37g2000yqp.googlegroups.com...
On May 27, 2:46 pm, "JB" <nos...@goofball.net> wrote:
> "JIMMIE" <JIMMIEDEE...@YAHOO.COM> wrote in message
>
> news:8e14c33f-91c6-44f0-9ce4-2a6c8e587ff1@m19g2000yqk.googlegroups.com...
> On May 26, 8:30 pm, j...@specsol.spam.sux.com wrote:
>
>
>
>
>
> > JIMMIE <JIMMIEDEE...@yahoo.com> wrote:
> > > I have an HF transceiver which can be easily modified to work outside
> > > the ham bands. I want to perform the mod so I can use the radio with
> > > VHF/UHF transverters and cover the entire bands. Would this be legal?
> > > I have discussed this with several fellow hams but have not really got
> > > any kind of definitive answer yet.
>
> > > Jimmie.
>
> > As a licensed amateur (I'm assuming US), you can do anything you want
> > with your equipment as long as you don't transmit outside of the
> > frequencies and modes authorized by your class of license.
>
> > --
> > Jim Pennino
>
> > Remove .spam.sux to reply.
> >Thanks Tom and Jim, It was also my reasoning that if I could build my
>
> own transmitter and operate it surely modifying equipment would be
> legal as long as I did not transmit outside the bands. The radio is
> an Icom and I use software thst I wrote to control the frequency/mode.
> It would not be too difficult to modify the software to limit the
> frequency data sent to the transceiver in accordance with the band I
> am using. The software already "knows" when I use the transverters so
> I get the proper frequency dispaly. As the XYL and YL may be using it
> some goof proofing may be in order. Hopefully soon I will also have
> the computer controling the switching of the transverters.
>
> >Jimmie
>
> The spectral purity specifications in part 97. Most HF rigs have allowed

> some out of band operation ever since I could remember. It is the shared
> responsibility of the station licensee and control ops to stay cleanly
> within their grant. Regular RG 58c provides at least 60db of isolation
from
> adjacent cabling. Be aware of the possibilities of what might come out of
> the antenna ports and take appropriate action. If you waste a little power
> in an attenuator and/ or filter circuit on the input of the Xverter,
> spurious from the driving radio are also reduced. Nice to be able to
verify
> with a spectrum analyzer too if you know someone. GL- Hide quoted text -
>
> - Show quoted text -

>I did the mod today and it certainly is nice to be able to work the
whole 2M band AM/FM/SSB and CW. I still have to do some cabling when I
go from HF to VHF or vice versa I have some really good coaxial relays
that I could soon rig up to operate manually and hopefully controled
by the PC in the more distant future. The transverter I have was set
up for use with a 10M IF however if I could modify it for a 6M IF
things would be greatly simplified as the transceiver covers 6M at
reduce power(10 watts) compared to 100 watts on HF.

>Jimmie

I certainly like the idea of using the ham rig as a decent general coverage
receiver for SWL and I had to do the mod anyway for 60m operation. You just
have to get in the habit of looking at the radio to verify conditions before
keying up. Like checking the swimming pool to see if there is water in it
first.

715. "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-31 00:28:18 UTC
From: Usual Suspect <reply@thegroup.net>
Message-ID: <0001HW.C6471D3203CAB1EBB01AD9AF@news.sf.sbcglobal.net>
Source record: 2618
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

WInegard makes an antenna-in-a-box, the SS-1000 which lists ~4 db gain over the UHF TV range:

<http://tinyurl.com/nqpzm2>

I must say at the outset that I am hesitant to buy an antenna based on its form-factor, but I'm forced by the local code to not display bare-element type antennae on the mast.

I do like the panel style for the reason that I can arrange 3 around a common mast, aimed at remote cities, and join the outputs for increased coverage.

Has anyone experience with the SS-1000? Or can recommend a similar style antenna?

Thanks.
--
Al, the usual

716. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-31 05:33:40 UTC
From: stratus46@yahoo.com
Message-ID: <1350ff6e-c913-46c0-958d-6d2e2daab934@q16g2000yqg.googlegroups.com>
Source record: 2619
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

On May 30, 5:28 pm, Usual Suspect <re...@thegroup.net> wrote:
> WInegard makes an antenna-in-a-box, the SS-1000 which lists ~4 db
gain over
> the UHF TV range:
>
> <http://tinyurl.com/nqpzm2>
>
> I must say at the outset that I am hesitant to buy an antenna based
on its
> form-factor, but I'm forced by the local code to not display bare-
element
> type antennae on the mast.
>
> I do like the panel style for the reason that I can arrange 3
around a common
> mast, aimed at remote cities, and join the outputs for increased
coverage.
>
> Has anyone experience with the SS-1000? Or can recommend a similar
style
> antenna?
>
> Thanks.
> --
> Al, the usual

I've had one on the roof since Dec 2004 in 90274 35 miles from Mt
Wilson split 4 ways with no preamps. It's a fine little UHF antenna
and while they say it can do upper VHF, I have serious doubts. I'll
find out for certain in 2 weeks.

G²

717. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-31 07:26:37 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <QiqUl.64902$Rf7.19106@newsfe21.iad>
Source record: 2620
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

"Usual Suspect" <reply@thegroup.net> wrote in message
news:0001HW.C6471D3203CAB1EBB01AD9AF@news.sf.sbcglobal.net...

< snip >

> I do like the panel style for the reason that I can arrange 3 around a
common
> mast, aimed at remote cities, and join the outputs for increased coverage.

You may encounter some undesired affects from joining antennas. If it
works, fine, but if it doesn't, consider switching among the three at the TV
set(s).

The problem is that the prime signal will be "contaminated" by signal pickup
from the other antenna(s). The degree of contamination may or not affect
reception.

Good luck.

718. LMX2326 & Homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-31 07:34:57 UTC
From: EFR <kevin.voet@gmail.com>
Message-ID: <0f7ea44b-7da7-4a14-8982-b175e3e81092@m19g2000yqk.googlegroups.com>
Source record: 2621

I'm in possestion of 4 LMX2326 PLL IC's and I'm looking for projects
to use them in.

I was thinking of building and designing an RF Signal Generator but
I'm confused about the VCO. Is it possible to use the LMX2326 to drive
a VCO built up of discrete components or do you have to work with an
VCO IC like the ones from minicircuits?

719. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-31 14:31:36 UTC
From: Usual Suspect <reply@thegroup.net>
Message-ID: <0001HW.C647E2D803F904A1B01AD9AF@news.sf.sbcglobal.net>
Source record: 2622
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

> I've had one on the roof since Dec 2004 in 90274 35 miles from Mt
> Wilson split 4 ways with no preamps. It's a fine little UHF antenna
> and while they say it can do upper VHF, I have serious doubts. I'll
> find out for certain in 2 weeks.
> Gï¿œ

Thanks, G, for answering the question *asked*. I appreciate it. :-)

The issue re. rights may be interesting to some, but was not asked. (Man, the signal-to-noise ration on USENET is *so* low...)

If you think of it, please post a follow-up in 2 weeks.

Thanks.
--
Al, the usual

720. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-31 14:32:04 UTC
From: Rich Griffiths <richgrif@one.net>
Message-ID: <IrKdneCiEaF5Cb_XnZ2dnUVZ_oednZ2d@posted.nuvoxcommunications>
Source record: 2623
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

On Sat, 30 May 2009 21:32:58 -0400, Elmo P. Shagnasty wrote:

> In article <0001HW.C6471D3203CAB1EBB01AD9AF@news.sf.sbcglobal.net>,
> Usual Suspect <reply@thegroup.net> wrote:
>
>> I must say at the outset that I am hesitant to buy an antenna based on
>> its form-factor, but I'm forced by the local code to not display
>> bare-element type antennae on the mast.
>
> I don't believe the local code has any say in the matter.
>
> But if you want to give up your rights...

I believe what Elmo says is correct.

Check out: http://www.fcc.gov/mb/facts/otard.html

which says, in part:

The rule (47 C.F.R. Section 1.4000) has been in effect since October
1996, and it prohibits restrictions that impair the installation,
maintenance or use of antennas used to receive video programming. The
rule applies to video antennas including direct-to-home satellite dishes
that are less than one meter (39.37") in diameter (or of any size in
Alaska), TV antennas, and wireless cable antennas. The rule prohibits
most restrictions that: (1) unreasonably delay or prevent installation,
maintenance or use; (2) unreasonably increase the cost of installation,
maintenance or use; or (3) preclude reception of an acceptable quality
signal.

In this ruling, the FCC pre-empted not only state and local government
regulations but HOA CCR's and landlords' restrictions on renters.

This came about because the broadcasters have a strong lobby, and they
didn't want widespread limitations on receiving their over-the-air or
satellite transmissions.

721. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-31 15:12:09 UTC
From: Usual Suspect <reply@thegroup.net>
Message-ID: <0001HW.C647EC5903FB3EF5B01AD9AF@news.sf.sbcglobal.net>
Source record: 2624
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

> Your question was framed around an assertion that is not true.
>
> As such, your question is moot. You, however, want an answer to a moot
> question? And when your false assertion is explained to you as being
> false, complete with details, you consider that "noise"?
>
> "How many baseballs can fit inside the soul of a poet?"

I asked a question. I didn't ask Is my assertion correct? Assume it is
(regardless FCC mandates).

You (and others) decided to answer an unasked question.

But let's not drag this on. I'd like to hear from anyone who has used this
antenna or other like it.

Thanks.
--
Al, the usual

722. Re: Transceiver mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-31 15:25:00 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <4eb5fa09-1da5-4ea2-b31e-f59dacecfa9a@z7g2000vbh.googlegroups.com>
Source record: 2625

Like checking the swimming pool to see if there is water in it
> first.

Hey OM:

My swimming pool is Lake Erie, be a long time for it to dry out.

73 OM
de n8zu

723. Re: LMX2326 & Homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-31 15:51:46 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <c648286c-67e9-4dac-9437-cd701035f7e3@s28g2000vbp.googlegroups.com>
Source record: 2626

On May 31, 3:34 am, EFR <kevin.v...@gmail.com> wrote:
> I'm in possestion of 4 LMX2326 PLL IC's and I'm looking for projects
> to use them in.
>
> I was thinking of building and designing an RF Signal Generator but
> I'm confused about the VCO. Is it possible to use the LMX2326 to drive
> a VCO built up of discrete components or do you have to work with an
> VCO IC like the ones from minicircuits?

Hey OM:

Sure discrete is ok, you are going to use GaAs fets i assume? The
caveat is feedback the correct signal level to Fin or NOT>Fin.

73 OM
de n8zu

724. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-31 16:04:22 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <eedf031f-c023-4a15-abea-8a3b22751339@r16g2000vbn.googlegroups.com>
Source record: 2627
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

On May 30, 8:28 pm, Usual Suspect <re...@thegroup.net> wrote:
> WInegard makes an antenna-in-a-box, the SS-1000 which lists ~4 db gain over
> the UHF TV range:
>
> <http://tinyurl.com/nqpzm2>
>
> I must say at the outset that I am hesitant to buy an antenna based on its
> form-factor, but I'm forced by the local code to not display bare-element
> type antennae on the mast.
>
> I do like the panel style for the reason that I can arrange 3 around a common
> mast, aimed at remote cities, and join the outputs for increased coverage.
>
> Has anyone experience with the SS-1000? Or can recommend a similar style
> antenna?
>
> Thanks.
> --
> Al, the usual

Hey OM
This si just a rehash of another post awhile back in this here forum.
But DTV will never go away so:

I seen one on youtube, there are a tonne of them, but this, to the
best of my recollection, one used:

1pc 1x2 2ft long board
5 steel wire coat hangers
dry wall screws
and a 75 ohm to 300 ohm balun

to make a 4 bay bowtie antenna

Ideally that's 6 db over, just a single bowtie.

And an 8 bay bowtie would be 9db.

I the real world it would be slightly less

Capture area of stacked antennas is greater, so less UHF fading. Like
when the wind blows trees branches around and when cars and trucks go
by.

But nothing like watching a pixelated picture. Unless you got a good
memory in that set box.

73 OM
de n8zu

725. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-31 17:06:45 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <1rc525huu0prd8mq1hoc3cmqd7a6gug79b@4ax.com>
Source record: 2628
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

On Sat, 30 May 2009 17:28:18 -0700, Usual Suspect <reply@thegroup.net>
wrote:

>WInegard makes an antenna-in-a-box, the SS-1000 which lists ~4 db gain over
>the UHF TV range:
><http://tinyurl.com/nqpzm2>

4dB isn't very much gain. Compare this with some other available
antennas:
<http://www.hdtvprimer.com/ANTENNAS/comparing.html>
Unfortunately, the SS-1000 and SS-1000 are not listed.

Depending on the distance between your apartment and the antenna
location, the +4dB antenna gain may not be sufficient to compensate
for the coax loss. Are you in a weak signal or strong signal area? Is
an antenna amplifier justified? If so, you might need 3 amplifiers
for your 3 different directions.

Also, a 4dB gain antenna will not have a very directional antenna
pattern or be particularly directional. My guess(tm) is perhaps 120
degrees wide. There probably won't be much difference in signal
strength if your 3 directions are within the beam width.

>I must say at the outset that I am hesitant to buy an antenna based on its
>form-factor, but I'm forced by the local code to not display bare-element
>type antennae on the mast.

As others have mentioned, this is mostly incorrect. The problem is in
the interpretation of the word "unreasonable", which might be
interpreted in a variety of ways. Without details on your situation,
I can't comment on this.

>I do like the panel style for the reason that I can arrange 3 around a common
>mast, aimed at remote cities, and join the outputs for increased coverage.

Mast? Welcome to "unreasonable". The FCC 47.1.4000 clause that
limits antenna installation has nothing to say about the supporting
structure. While the HOA may not be able to prevent you from
installing an antenna, they most certainly will have something to say
about the design and construction of the supporting structure. They
may also demand that it be installed by a licensed and insured
installer to protect themselves against subsequent litigation. I know
you don't want to hear about all this, but methinks you should at
least be warned before blundering onward.

>Has anyone experience with the SS-1000? Or can recommend a similar style
>antenna?

No recommendations. Antennas are sized and designed to solve specific
problems. The design required in a strong signal area is quite
different from one in a weak signal area, in an urban canyon, for an
indoor installation, or if it is intended to be disguised or
minimalized. It's also important to know the lowest VHF frequency or
channel that the antenna is expected to operate as this has a huge
effect on the physical size of the antenna. Without a clue as to your
situation, it's impossible to offer an endorsement or alternative. If
you find it inconvenient to disclose such details, I suggest you use:
<http://www.antennaweb.org>
to optimize your selection and proposed installation.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

726. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-31 17:35:03 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <mqe525lg2q52l33ecmvkuj1u2h6sjfaifn@4ax.com>
Source record: 2629
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

On Sat, 30 May 2009 17:28:18 -0700, Usual Suspect <reply@thegroup.net>
wrote:

>but I'm forced by the local code to not display bare-element
>type antennae on the mast.

Seeing that you are forced into this, you will suffer by the same
degree. In comparisons to others in the field, it is good by
technical standards - for UHF (low VHF is just hopes and dreams). In
comparisons to others in the field, it is mediocre by cost standards.

So you suffer in cost and coverage (if you want VHF); and form factor
is always going to reign.

This should come as no surprise, certainly.

>Or can recommend a similar style
>antenna?

To suffer equally? As you really lead with your chin ("local code"
and hewing to not arguing that line) and don't offer any technical
specifics (where you live, what stations, what directions, what
distances, what bands, what frequencies, what height mast - in short
nothing) you might fill a 16x16x4 inch box with low denomination
bills, attach a cord and see how that works. If it doesn't, then send
the cash filled box to Winegard and ask that they fill the box with an
antenna in return for what they find inside. It may work equally
well.

Sorry for the lengthy answer that sums up to "maybe," short questions
often require even more elaboration to upgrade to "perhaps."

73's
Richard Clark, KB7QHC

727. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-31 18:00:50 UTC
From: Jerry <jerrymartes@verizon.net>
Message-ID: <mBzUl.1721$Cc1.1357@nwrddc01.gnilink.net>
Source record: 2630
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

"Usual Suspect" <reply@thegroup.net> wrote in message
news:0001HW.C6471D3203CAB1EBB01AD9AF@news.sf.sbcglobal.net...
> WInegard makes an antenna-in-a-box, the SS-1000 which lists ~4 db gain
> over
> the UHF TV range:
>
> <http://tinyurl.com/nqpzm2>
>
> I must say at the outset that I am hesitant to buy an antenna based on its
> form-factor, but I'm forced by the local code to not display bare-element
> type antennae on the mast.
>
> I do like the panel style for the reason that I can arrange 3 around a
> common
> mast, aimed at remote cities, and join the outputs for increased coverage.
>
> Has anyone experience with the SS-1000? Or can recommend a similar style
> antenna?
>
> Thanks.
> --
> Al, the usual

Hi Al

The gain of an antenna is related to its radiation pattern shape.
When the signal ois divided between several antennas, the "gain" of the
system is lowered.

For instance, when the "gain" of the antenna is the result of its
directuivity being restricted to 180 degrees azimuth, and the second
(identical) antenna is mounted to cover the other 180 degrees, the "gain of
the both" is 3 dB. lower than the gain of either antenna alone.

If the "remote cities" produce signals that are weak enough that you are
required to have antenna gain to receive them, you may need a switch that
disconnects all but one antenna for channels from that city.

Jerry KD6JDJ

728. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-31 18:16:42 UTC
From: stratus46@yahoo.com
Message-ID: <3607e29e-3401-4d4b-a053-6d9af8bdf100@e20g2000vbc.googlegroups.com>
Source record: 2631
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

On May 31, 10:06 am, Jeff Liebermann <je...@cruzio.com> wrote:
> On Sat, 30 May 2009 17:28:18 -0700, Usual Suspect
<re...@thegroup.net>
> wrote:
>
> >WInegard makes an antenna-in-a-box, the SS-1000 which lists ~4 db
gain over
> >the UHF TV range:
> ><http://tinyurl.com/nqpzm2>
>
> 4dB isn't very much gain. Compare this with some other available
> antennas:
> <http://www.hdtvprimer.com/ANTENNAS/comparing.html>
> Unfortunately, the SS-1000 and SS-1000 are not listed.

Sure it is but it's called 'Square Shooter'

> Depending on the distance between your apartment and the antenna
> location, the +4dB antenna gain may not be sufficient to compensate
> for the coax loss. Are you in a weak signal or strong signal area?
Is
> an antenna amplifier justified? If so, you might need 3
amplifiers
> for your 3 different directions.

As I said, I use it 35 miles out from Mt Wilson (Los Angeles) and have
it split 4 ways - no preamps. I do have Line Of Sight (just barely)

> Also, a 4dB gain antenna will not have a very directional antenna
> pattern or be particularly directional. My guess(tm) is perhaps
120
> degrees wide. There probably won't be much difference in signal
> strength if your 3 directions are within the beam width.

You're right, it isn't very directional but it has a reasonable front-
to-back ratio.

> >I must say at the outset that I am hesitant to buy an antenna
based on its
> >form-factor, but I'm forced by the local code to not display bare-
element
> >type antennae on the mast.

I don't like getting into 'contests' with the HOAs if I can avoid it.
After all, we have to live with them.

> As others have mentioned, this is mostly incorrect. The problem is
in
> the interpretation of the word "unreasonable", which might be
> interpreted in a variety of ways. Without details on your
situation,
> I can't comment on this.
>
> >I do like the panel style for the reason that I can arrange 3
around a common
> >mast, aimed at remote cities, and join the outputs for increased
coverage.
>
> Mast? Welcome to "unreasonable". The FCC 47.1.4000 clause that
> limits antenna installation has nothing to say about the supporting
> structure. While the HOA may not be able to prevent you from
> installing an antenna, they most certainly will have something to
say
> about the design and construction of the supporting structure.
 They
> may also demand that it be installed by a licensed and insured
> installer to protect themselves against subsequent litigation. I
know
> you don't want to hear about all this, but methinks you should at
> least be warned before blundering onward.
>
> >Has anyone experience with the SS-1000? Or can recommend a similar
style
> >antenna?
>
> No recommendations. Antennas are sized and designed to solve
specific
> problems. The design required in a strong signal area is quite
> different from one in a weak signal area, in an urban canyon, for
an
> indoor installation, or if it is intended to be disguised or
> minimalized. It's also important to know the lowest VHF frequency
or
> channel that the antenna is expected to operate as this has a huge
> effect on the physical size of the antenna. Without a clue as to
your
> situation, it's impossible to offer an endorsement or alternative.
 If
> you find it inconvenient to disclose such details, I suggest you
use:
> <http://www.antennaweb.org>
> to optimize your selection and proposed installation.
>
> --
> Jeff Liebermann   je...@cruzio.com

All I can say is I've been using Winegard antennas since 1974 and have found them to be well built good performers and have never been disappointed with their products. Also, any friends who took my advice were never disappointed with either the antannas OR me.

G²

729. Re: Transceiver mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-31 18:20:22 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <V-qdnWv_TJz7V7_XnZ2dnUVZ_hZi4p2d@bright.net>
Source record: 2632

raypsi wrote:
> Like checking the swimming pool to see if there is water in it
>> first.
>
> Hey OM:
>
> My swimming pool is Lake Erie, be a long time for it to dry out.
>
> 73 OM
> de n8zu
>

Isn't that like swimming in a cesspool? Isn't that the most polluted of the Great Lakes? I live near Lake Superior...water looks clean but it's damn cold (but the icebergs do give you a nice place to get out and rest on the swim from Ashland (WI) to Thunder Bay, Ontario) ;)

Scott
N0EDV

730. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-31 18:52:28 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <9dj525ls0f32k96aubotstuvjp6jmqt2vs@4ax.com>
Source record: 2633
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

On Sun, 31 May 2009 11:16:42 -0700 (PDT), stratus46@yahoo.com wrote:

>On May 31, 10:06ï¿½am, Jeff Liebermann <je...@cruzio.com> wrote:

> > <http://www.hdtvprimer.com/ANTENNAS/comparing.html>
> > Unfortunately, the SS-1000 and SS-1000 are not listed.
>
>Sure it is but it's called 'Square Shooter'

Sorry, typo error. I mean't the SS-1000 and SS-2000 (amplified). It
does list the "Sharp Shooter" which is a different indoor antenna.

What's inside the SS-1000 and some really weird "gain" tests:
<http://www.hdtvexpert.com/pages/squareshot.htm>

>As I said, I use it 35 miles out from Mt Wilson (Los Angeles) and have
>it split 4 ways - no preamps. I do have Line Of Sight (just barely)

Yes, but the original poster may not have such an ideal location.

Also, bad guess on the beamwidth. It's 54 (channel 69) to 95 (channel
7) degrees. Sorry.

>You're right, it isn't very directional but it has a reasonable front-
>to-back ratio.

It varies with frequency. It's only 2.6dB at channel 10. See specs
below.

>All I can say is I've been using Winegard antennas since 1974 and have
>found them to be well built good performers and have never been
>disappointed with their products. Also, any friends who took my advice
>were never disappointed with either the antannas OR me.

I try to avoid shopping by brand. Even the best manufacturers have
their lemons and losers. Right now, the advertising trend is to
replace your existing antenna with an HD or Digital TV antenna,
whatever that means. Also, to make it look like a DBS dish, which is
generally accepted by most HOA.

Specs and details:
<http://www.winegarddirect.com/pdf/spec_ss1000-ss2000.pdf>
<http://www.winegarddirect.com/squareshooter-ss1000-ss2000/winegard-square-shooter.htm>
<http://www.winegarddirect.com/viewitem~p~ss-1000~d~Winegard-SS1000-SquareShooter-UHF-Only
-DigitalAnalogHDTV-Antenna-System-(SS1000)~post~.htm>
I don't see much to complain about in the design and construction of
this antenna. However, whether it's suitable for the OP's location

and application is unknown.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

731. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-31 21:04:50 UTC
From: Usual Suspect <reply@thegroup.net>
Message-ID: <0001HW.C6483F02040E9E7FB01AD9AF@news.sf.sbcglobal.net>
Source record: 2634
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

> Yes, but the original poster may not have such an ideal location.

TV Fool azimuth plot:

<http://i44.tinypic.com/2a4wghx.jpg>

Was considering 3 antennae with wide reception angles pointed generally at
45, 140, 310 deg. Only 3 are LOS (15, 18, 33)

Pretty flat terrain, no tall structures nearby . Top of the mast: 14 ft. agl.

Thanks.
--
Al, the usual

732. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-31 22:18:48 UTC
From: stratus46@yahoo.com
Message-ID: <0078dd88-c6d0-48f7-bf48-508fd6797d13@b9g2000yqm.googlegroups.com>
Source record: 2635
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

On May 31, 11:52 am, Jeff Liebermann <je...@cruzio.com> wrote:
> On Sun, 31 May 2009 11:16:42 -0700 (PDT), stratu...@yahoo.com wrote:
> >On May 31, 10:06 am, Jeff Liebermann <je...@cruzio.com> wrote:
> > > <http://www.hdtvprimer.com/ANTENNAS/comparing.html>
> > > Unfortunately, the SS-1000 and SS-1000 are not listed.
>
> >Sure it is but it's called 'Square Shooter'
>
> Sorry, typo error. I mean't the SS-1000 and SS-2000 (amplified). It
> does list the "Sharp Shooter" which is a different indoor antenna.
>
> What's inside the SS-1000 and some really weird "gain" tests:
> <http://www.hdtvexpert.com/pages/squareshot.htm>

It's antenna 'M', the Square Shooter

> >As I said, I use it 35 miles out from Mt Wilson (Los Angeles) and have
> >it split 4 ways - no preamps. I do have Line Of Sight (just barely)
>
> Yes, but the original poster may not have such an ideal location.

And that is why I point out my line of sight condidtion at 35 miles

> Also, bad guess on the beamwidth. It's 54 (channel 69) to 95 (channel
> 7) degrees. Sorry.
>
> >You're right, it isn't very directional but it has a reasonable front-
> >to-back ratio.
>
> It varies with frequency. It's only 2.6dB at channel 10. See specs
> below.

I don't expect it to be usable where I'm at for channels 7,9,11 and
13. I'll try it and if / when it fails, I'll tie in the VHF of the
Winegard in the garage eaves. Hopefully its VHF performance will make
the grade under the roof 'chaff'. If the wife would put up with the
all channel garage antenna on the roof, it would certainly be fine BUT
she doesn't want to look at it, hence the SS-1000 at least for the
UHF.

> >All I can say is I've been using Winegard antennas since 1974 and have
> >found them to be well built good performers and have never been
> >disappointed with their products. Also, any friends who took my advice
> >were never disappointed with either the antannas OR me.
>

> I try to avoid shopping by brand. Even the best manufacturers have
> their lemons and losers. Right now, the advertising trend is to
> replace your existing antenna with an HD or Digital TV antenna,
> whatever that means. Also, to make it look like a DBS dish, which is
> generally accepted by most HOA.
>
> Specs and details:
> <http://www.winegarddirect.com/pdf/spec_ss1000-ss2000.pdf>
> <http://www.winegarddirect.com/squareshooter-ss1000-ss2000/winegard-sq...>
> <http://www.winegarddirect.com/viewitem~p~ss-1000~d~Winegard-SS1000-Sq...>
> I don't see much to complain about in the design and construction of
> this antenna. However, whether it's suitable for the OP's location
> and application is unknown.
>
> --
> Jeff Liebermann   je...@cruzio.com

You won't find any new Sony at our house but you will find 4 Gigabyte motherboards with AMD processors, 3 old Technics receivers, 8 Advent speakers, Canon cameras and a lot of who knows what. When one of the brands falls short I'll re-evaluate but for now I'm happy.

G²

733. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-05-31 23:54:28 UTC
From: Gordon <gonzo@alltomyself.com>
Message-ID: <Xns9C1CABF8C29B9greederxprtnet@194.177.98.144>
Source record: 2636
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

raypsi <RBorowiak@gmail.com> wrote in news:eedf031f-c023-4a15-abea-8a3b22751339@r16g2000vbn.googlegroups.com:

> Hey OM
> This si just a rehash of another post awhile back in this here forum.
> But DTV will never go away so:
>
> I seen one on youtube, there are a tonne of them, but this, to the
> best of my recollection, one used:
>
> 1pc 1x2 2ft long board
> 5 steel wire coat hangers
> dry wall screws
> and a 75 ohm to 300 ohm balun
>
> to make a 4 bay bowtie antenna
>

That one is all over the internet. It works OK, but you would get better results with copper wire, not steel coat hangers. It also looks ugly.

For another idea, do a google for a Hoverman style antenna.

Then there is mine...

http://mysite.verizon.net/g_reeder/Content/DTV_antenna.html

734. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-01 00:24:29 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <pk6625dk2bi2l6c0e3bhf5lqctsq1n11lb@4ax.com>
Source record: 2637
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

On Sun, 31 May 2009 14:04:50 -0700, Usual Suspect <reply@thegroup.net>
wrote:

>> Yes, but the original poster may not have such an ideal location.
>
>TV Fool azimuth plot:
><http://i44.tinypic.com/2a4wghx.jpg>

Nice plot. Kinda looks like you'll need a rotator. The -3dB
beamwidth varies from 54 to 95 degrees. At best, 3 antennas will
cover 3*95 = 285 degrees. At worst, 3*54 = 162 degrees.

>Was considering 3 antennae with wide reception angles pointed generally at
>45, 140, 310 deg. Only 3 are LOS (15, 18, 33)

What are the ranges and approximate signal strengths? Looks like 18
and 33 can be covered with one antenna pointed at about 250 degrees. A
second antenna at 45 degrees *MIGHT* catch the largest number of
channels. However, there's no optimum location for a 3rd antenna to
catch all the remaining stations. You'll probably have to pick and
choose among the relatively strong ones and take what you can get.
With a UHF only antenna, stations 2-13 are problematic (or
impossible). If you're going to run multiple antennas, you'll
probably need an antenna switch, 3 tower mounted amplifiers, and 3
coax cable runs. If you try to combine then with a power splitter,
you'll get interaction between antennas and an ugly and unpredictable
pattern.

With an indoor antenna of any sorts, which ones can you receive
(including the weak ones)? With only 4dBi of antenna gain, I don't
think you'll be able to dig the ones you can't receive out of the
noise.

>Pretty flat terrain, no tall structures nearby . Top of the mast: 14 ft. agl.

They let you have a 14 ft mast and you're worried about the antenna
police? Might as well go for broke. Install a real yagi antenna,
tower mounted amplifier, and rotator. For the tower amp, I recommend
a Channel Master 7777.
<http://www.channelmasterintl.com/amplifiers.html>
For an antenna, whatever you can find. The bigger and uglier the
anenna, the better it works. See specs at:
<http://www.hdtvprimer.com/ANTENNAS/comparing.html>

If you're not sure, buy just one antenna, hang it out the window on a
broom stick, and see what it does. If you're close, continue with

your proposed ideas. If it looks hopeless, give up before you burn
any more money.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

735. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-01 03:13:57 UTC
From: sorry-spammers <"w9wi\\@(sorry-spammers)">
Message-ID: <I7CdnZxqDqTq2r7XnZ2dnUVZ_vWdnZ2d@earthlink.com>
Source record: 2638
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

Rich Griffiths wrote:
> Check out: http://www.fcc.gov/mb/facts/otard.html
>
> ...
>
> In this ruling, the FCC pre-empted not only state and local government
> regulations but HOA CCR's and landlords' restrictions on renters.
>
> This came about because the broadcasters have a strong lobby, and they
> didn't want widespread limitations on receiving their over-the-air or
> satellite transmissions.

I would suggest it came about because cable operators have a strong lobby and wanted to be deregulated. The FCC was reluctant to do so as long as many apartment- and condo-dwellers had no choice but to subscribe to cable. By ensuring these people have access to OTA TV you ensure (at least in theory) that if deregulated cable rates get too high, one can switch to OTA or satellite.

==========

Either way, Elmo is indeed correct.

--

Doug Smith W9WI
Pleasant View, TN EM66

736. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-01 05:00:34 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <TfJUl.67232$ho7.5840@newsfe10.iad>
Source record: 2639
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

"Gordon" <gonzo@alltomyself.com> wrote in message
news:Xns9C1CABF8C29B9greederxprtnet@194.177.98.144...
> raypsi <RBorowiak@gmail.com> wrote in news:eedf031f-c023-4a15-abea-
> 8a3b22751339@r16g2000vbn.googlegroups.com:
>

>
> Then there is mine...
>
> http://mysite.verizon.net/g_reeder/Content/DTV_antenna.html

Hi, Gordon,

I recall when you introduced your neat handiwork to the group. I meant to ask a question:

Did you ever try connecting each of the antennas' twin lead to its own separate balun and combine the 75-ohm sides of the baluns into a single coax? A passive splitter, connected backwards, performs this function nicely.

I ask because, as you have your antenna wired (two antennas in parallel to a single balun) looks like an impedance mismatch; the balun wants a 300-ohm connection to the two screws and two 300-ohm antennas at the same time would be 150-ohms. I think you previously said you are not a techie, so forgive me if I'm using terms you don't know.

Not being one to argue with success, if you tried it and it wasn't any better, then more power to you. Rock on!

"Sal"

PS: For my fellow techies: Yes, I realize the 300-ohm figure for a bowtie is nominal and the actual impedance will differ from that figure. Paralleling the two antennas could be superior.

737. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-01 05:46:08 UTC
From: Gordon <gonzo@alltomyself.com>
Message-ID: <Xns9C1CE7992BD5Dgreederxprtnet@194.177.98.144>
Source record: 2640
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

"Sal M. Onella" <salmonella@food.poisoning.org> wrote in
news:TfJUl.67232$ho7.5840@newsfe10.iad:

>
> "Gordon" <gonzo@alltomyself.com> wrote in message
> news:Xns9C1CABF8C29B9greederxprtnet@194.177.98.144...
>> raypsi <RBorowiak@gmail.com> wrote in news:eedf031f-c023-4a15-abea-
>> 8a3b22751339@r16g2000vbn.googlegroups.com:
>>
>
>>
>> Then there is mine...
>>
>> http://mysite.verizon.net/g_reeder/Content/DTV_antenna.html
>
> Hi, Gordon,
>
> I recall when you introduced your neat handiwork to the group. I
> meant
> to ask a question:
>
> Did you ever try connecting each of the antennas' twin lead to its
> own
> separate balun and combine the 75-ohm sides of the baluns into a
> single coax? A passive splitter, connected backwards, performs this
> function nicely.

No, I didn't think to try that. I could give it a shot, I have all
the necessary parts. I am concerned about loss, and thought that
the extra hardware would introduce too much extra loss.

>
> I ask because, as you have your antenna wired (two antennas in
> parallel
> to a single balun) looks like an impedance mismatch; the balun wants
> a 300-ohm connection to the two screws and two 300-ohm antennas at the
> same time would be 150-ohms. I think you previously said you are not
> a techie, so forgive me if I'm using terms you don't know.

I'm following you.

Hmmm... Yes. I can see how there could be a mismatch. But I
thought that only applied to simple things like resistance in DC
and AC circuits. RF is not one of my forte`s.

Anyway, I was trying to mimic the Channelmaster two and 4 bay
bowtie designs, that seem to have a 300 ohm feed.

Maybe someone could explain that.

>
> Not being one to argue with success, if you tried it and it wasn't
> any
> better, then more power to you. Rock on!

Well, I got an improvement, probably in spite of myself. The
setup gives better signal strength, and is less suseptable to
interfearence (people walking aroung the room) than just a
single bowtie.

>
> "Sal"
>
> PS: For my fellow techies: Yes, I realize the 300-ohm figure for a
> bowtie is nominal and the actual impedance will differ from that
> figure. Paralleling the two antennas could be superior.
>
>
>

738. Re: LMX2326 & Homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-01 05:55:17 UTC
From: EFR <kevin.voet@gmail.com>
Message-ID: <08518b91-2644-4fa8-94fa-e167d72c30e4@c9g2000yqm.googlegroups.com>
Source record: 2641

On May 31, 5:51 pm, raypsi <RBorow...@gmail.com> wrote:
> On May 31, 3:34 am, EFR <kevin.v...@gmail.com> wrote:
>
> > I'm in possestion of 4 LMX2326 PLL IC's and I'm looking for projects
> > to use them in.
>
> > I was thinking of building and designing an RF Signal Generator but
> > I'm confused about the VCO. Is it possible to use the LMX2326 to drive
> > a VCO built up of discrete components or do you have to work with an
> > VCO IC like the ones from minicircuits?
>
> Hey OM:
>
> Sure discrete is ok, you are going to use GaAs fets i assume? The
> caveat is feedback the correct signal level to Fin or NOT>Fin.
>
> 73 OM
> de n8zu

I'll be using FET transistors, or experimenting. It's a learning
project anyway since I'm heading into microwave terrority next year
for my Master' degree. And I thought I'd get a head start by building
and designing some projects such as PLL driven VCO.

I'm now just looking for a good book on oscillator design. Any
suggestions?

739. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-01 06:00:03 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1243836001@panix.com>
Source record: 2642
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

740. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-01 11:49:20 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <1fPUl.27886$c45.4537@nlpi065.nbdc.sbc.com>
Source record: 2643
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

Gordon wrote:
> Well, I got an improvement, probably in spite of myself. The
> setup gives better signal strength, and is less suseptable to
> interfearence (people walking aroung the room) than just a
> single bowtie.

A mismatch can cause ghosting in an analog TV.
What does ghosting do to a digital TV signal?
--
73, Cecil, IEEE, OOTC, http://www.w5dxp.com

741. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-01 12:31:50 UTC
From: Bill M <radioexray@geemail.com>
Message-ID: <h00hnn0304c@news3.newsguy.com>
Source record: 2644
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

Cecil Moore wrote:
> Gordon wrote:
>> Well, I got an improvement, probably in spite of myself. The
>> setup gives better signal strength, and is less suseptable to
>> interfearence (people walking aroung the room) than just a single bowtie.
>
> A mismatch can cause ghosting in an analog TV.
> What does ghosting do to a digital TV signal?

If its bad enough it will wreck the reception. But the latest
processors can tolerate multipath that is only 1 db down.

They are getting better as they try to debug HDTV for mobile reception.

-Bill

742. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-01 15:26:30 UTC
From: stratus46@yahoo.com
Message-ID: <8a4f6c14-b5bf-40d3-a363-f511093a70ef@n19g2000vba.googlegroups.com>
Source record: 2645
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

On Jun 1, 4:49 am, Cecil Moore <nos...@w5dxp.com> wrote:
> Gordon wrote:
> > Well, I got an improvement, probably in spite of myself. The
> > setup gives better signal strength, and is less suseptable to
> > interfearence (people walking aroung the room) than just a
> > single bowtie.
>
> A mismatch can cause ghosting in an analog TV.
> What does ghosting do to a digital TV signal?
> --
> 73, Cecil, IEEE, OOTC, http://www.w5dxp.com

It puts 'ripples' into the passband. The ripples happen because of
phase cancelations. The ATI HDTV Wonder cards can handle variations to
around 8-10 dB. After that it just freezes up.

Near the bottom of the page in the link there is an example of the
ATSC spectrum. Add random dips into it.

http://www.hdtvprimer.com/ISSUES/what_is_ATSC.html

G²

743. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-01 16:11:37 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <ntu725964u1tkh09t4elcujbg4plg38r6s@4ax.com>
Source record: 2646
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

On Mon, 01 Jun 2009 06:49:20 -0500, Cecil Moore <nospam@w5dxp.com>
wrote:

>A mismatch can cause ghosting in an analog TV.
>What does ghosting do to a digital TV signal?

Your worst nightmare. From 10 years ago:
<http://www.businessweek.com/bwdaily/dnflash/aug1999/nf90826b.htm>
(Note the sales predictions, which were totally wrong).
All DTV chipsets now have ghost elimination circuitry, which does a
good job of reducing multipath problems. There's a spec for it but
I'm too lazy to look. Here's the patent:
<http://www.google.com/patents?id=XNp3AAAAEBAJ&dq=7038732>
with references to others in citations. I won't pretend to understand
how it works.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

744. OTARD rules Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-01 17:23:25 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <h012qd$8le$1@news.jpl.nasa.gov>
Source record: 2647
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

Jeff Liebermann wrote:

>> I must say at the outset that I am hesitant to buy an antenna based on its
>> form-factor, but I'm forced by the local code to not display bare-element
>> type antennae on the mast.
>
> As others have mentioned, this is mostly incorrect. The problem is in
> the interpretation of the word "unreasonable", which might be
> interpreted in a variety of ways. Without details on your situation,
> I can't comment on this.

The FCC website has quite a bit of info on interpretation (from various regulatory and legal actions) of what is and isn't unreasonable. Paint color: reasonable, restrictions on location: unreasonable, restrictions on form of antenna: unreasonable.

>
>> I do like the panel style for the reason that I can arrange 3 around a common
>> mast, aimed at remote cities, and join the outputs for increased coverage.
>
> Mast? Welcome to "unreasonable". The FCC 47.1.4000 clause that
> limits antenna installation has nothing to say about the supporting
> structure. While the HOA may not be able to prevent you from
> installing an antenna, they most certainly will have something to say
> about the design and construction of the supporting structure. They
> may also demand that it be installed by a licensed and insured
> installer to protect themselves against subsequent litigation. I know
> you don't want to hear about all this, but methinks you should at
> least be warned before blundering onward.
>

Hah.. go look at the case of Stanley and Vera Holliday.. 5 masts 30 ft high, multiple dishes and antenans...

http://www.fcc.gov/Bureaus/Cable/Orders/1999/da992132.txt

an analysis at
http://dirt.umkc.edu//dd99/DD991025.htm

745. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-01 20:27:01 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <apd825dus5d4b11qnds099cop5270tkku8@4ax.com>
Source record: 2648
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

On Mon, 01 Jun 2009 06:49:20 -0500, Cecil Moore <nospam@w5dxp.com>
wrote:

>Gordon wrote:
>> Well, I got an improvement, probably in spite of myself. The
>> setup gives better signal strength, and is less suseptable to
>> interfearence (people walking aroung the room) than just a
>> single bowtie.
>
>A mismatch can cause ghosting in an analog TV.
>What does ghosting do to a digital TV signal?

In countries using COFDM (DVB-T), the symbol time is about 1000 us
(8k) or 250 us (2k), so in the worst case with minimal guard
intervals, you can still use mismatched coaxial cables longer than 1
km without problems :-).

With ATSC 8VSB it depends how well the equalizer is capable of
detecting the characteristics of the radio and coaxial path with a
known signal pattern.

Paul OH3LWR

746. microDAC works in windows and linux!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-02 02:26:43 UTC
From: newuser33 <newuser33.46a5c47@radiobanter.com>
Message-ID: <newuser33.46a5c47@radiobanter.com>
Source record: 2649

yep its our new microDAC its out now!!!!

has windows and linux source code and applications!!!

tested on Ubuntu.

HID driver for windows, LIBusb for linux.

http://www.thesiliconhorizon.com

[image: http://www.thesiliconhorizon.com/content/microsplash.jpg]

thanks :)

--
newuser33

747. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-02 19:17:53 UTC
From: Radioguy <radioguy@tampabay.rr.com>
Message-ID: <4a257ae2$0$5068$9a6e19ea@unlimited.newshosting.com>
Source record: 2650
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

Elmo P. Shagnasty wrote:
> In article <0001HW.C6471D3203CAB1EBB01AD9AF@news.sf.sbcglobal.net>,
> Usual Suspect <reply@thegroup.net> wrote:
>
>> I must say at the outset that I am hesitant to buy an antenna based on its
>> form-factor, but I'm forced by the local code to not display bare-element
>> type antennae on the mast.
>
> I don't believe the local code has any say in the matter.
>
> But if you want to give up your rights...

This is true to a point. Local codes no problem, BUT in HOA territory
these rules do not necessarily apply. In most cases the HOAs have
modified their rules. The small direct satellite lobby started the
trend. Allowing these dishes they really had to include other TV antennas.

748. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-02 21:53:41 UTC
From: cjdaytonjrnospam@cox.net
Message-ID: <20090602175224.422$Gx@newsreader.com>
Source record: 2701
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

"Elmo P. Shagnasty" <elmop@nastydesigns.com> wrote:
> In article <4a257ae2$0$5068$9a6e19ea@unlimited.newshosting.com>,
> Radioguy <radioguy@tampabay.rr.com> wrote:
>
> > > I don't believe the local code has any say in the matter.
> > >
> > > But if you want to give up your rights...
> >
> > This is true to a point. Local codes no problem, BUT in HOA territory
> > these rules do not necessarily apply. In most cases the HOAs have
> > modified their rules.
>
> The FCC is the entity here, not local communities.
>
> And neither HOA nor local communities can override FCC in this matter.

You SHOULD know better, Elmo. There are some restrictions an HOA can
place on a homeowner, but they are few. Here is a link to the FCC site:
http://www.fcc.gov/mb/facts/otard.html

--
---------- http://NewsReader.Com/ ----------
Usenet Newsgroup Service $9.95/Month 30GB

749. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-02 22:23:55 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <h048pp$6hu$1@news.jpl.nasa.gov>
Source record: 2702
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

Radioguy wrote:
> Elmo P. Shagnasty wrote:
>> In article <0001HW.C6471D3203CAB1EBB01AD9AF@news.sf.sbcglobal.net>,
>> Usual Suspect <reply@thegroup.net> wrote:
>>
>>> I must say at the outset that I am hesitant to buy an antenna based
>>> on its form-factor, but I'm forced by the local code to not display
>>> bare-element type antennae on the mast.
>>
>> I don't believe the local code has any say in the matter.
>>
>> But if you want to give up your rights...
>
> This is true to a point. Local codes no problem, BUT in HOA territory
> these rules do not necessarily apply. In most cases the HOAs have
> modified their rules. The small direct satellite lobby started the
> trend. Allowing these dishes they really had to include other TV antennas.
the FCC premption (aka OTARD rules) is the key thing here.. The HOA
can't really do anything if it fits in the FCC guidelines.. dishes <1
meter, OTA TV any size.

750. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-03 03:07:55 UTC
From: stratus46@yahoo.com
Message-ID: <8b61e1ee-4e78-4e81-a1e5-e73a18285f7e@a36g2000yqc.googlegroups.com>
Source record: 2703
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

On Jun 2, 3:23 pm, Jim Lux <james.p....@jpl.nasa.gov> wrote:
> trend. Allowing these dishes they really had to include other TV
antennas.
>
>   the FCC premption (aka OTARD rules) is the key thing here.. The
HOA
> can't really do anything if it fits in the FCC guidelines.. dishes
<1
> meter, OTA TV any size.

Nice thing about the Winegard SquareShooter is it resembles a dish
though my neighbors might think I don't have a clue how to aim it.
It's opposite where all the little dishes are aimed. They would have
laughed if they had seen the spectrum analyzer on the driveway next to
the car. I was on the roof with binoculars to see the screen.

G²

751. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-03 03:27:49 UTC
From: RFI-EMI-GUY <Rhyolite@NETTALLY.COM>
Message-ID: <4a25edab$0$5074$9a6e19ea@unlimited.newshosting.com>
Source record: 2704
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

Sal M. Onella wrote:
> "Usual Suspect" <reply@thegroup.net> wrote in message
> news:0001HW.C6471D3203CAB1EBB01AD9AF@news.sf.sbcglobal.net...
>
> < snip >
>
>> I do like the panel style for the reason that I can arrange 3 around a
> common
>> mast, aimed at remote cities, and join the outputs for increased coverage.
>
> You may encounter some undesired affects from joining antennas. If it
> works, fine, but if it doesn't, consider switching among the three at the TV
> set(s).
>
> The problem is that the prime signal will be "contaminated" by signal pickup
> from the other antenna(s). The degree of contamination may or not affect
> reception.
>
> Good luck.
>
>
It will suffer phase distortion. In the good old days we called that
"ghosting", now it will be signal drop outs!

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Use only Genuine Interocitor Parts" Tom Servo ;-P

752. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-03 03:32:31 UTC
From: RFI-EMI-GUY <Rhyolite@NETTALLY.COM>
Message-ID: <4a25eec4$0$5074$9a6e19ea@unlimited.newshosting.com>
Source record: 2705
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

Elmo P. Shagnasty wrote:
> In article <0001HW.C6471D3203CAB1EBB01AD9AF@news.sf.sbcglobal.net>,
> Usual Suspect <reply@thegroup.net> wrote:
>
>> I must say at the outset that I am hesitant to buy an antenna based on its
>> form-factor, but I'm forced by the local code to not display bare-element
>> type antennae on the mast.
>
> I don't believe the local code has any say in the matter.
>
> But if you want to give up your rights...

When I lived in Miami; there was a subdivision in Miami Lakes that had
banned TV antennas (before the FCC ruling). A homeowner had constructed
some form of "artwork" with a TV antenna in front of his house. It was
positioned toward the sky, unusable, but unmistakably a TV antenna!

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Use only Genuine Interocitor Parts" Tom Servo ;-P

753. remote wireless device ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-03 21:00:49 UTC
From: Henry Kolesnik <kolesnik@nojunksbcglobal.net>
Message-ID: <4wBVl.18292$%54.8830@nlpi070.nbdc.sbc.com>
Source record: 2706

I'd like to find a small battery powered wireless device that I could
install on a mailbox that would send a signal when the box is opened.
I'd install a set of contacts to either open or close, and have the
monitor in the house about 100 feet away. Any ideas appreciated.
Thanks
Hank

754. Re: remote wireless device ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-03 21:20:50 UTC
From: Bert Hyman <bert@iphouse.com>
Message-ID: <Xns9C1FA64B57A4DVeebleFetzer@216.250.184.7>
Source record: 2707

In news:4wBVl.18292$%54.8830@nlpi070.nbdc.sbc.com "Henry Kolesnik"
<kolesnik@nojunksbcglobal.net> wrote:

> I'd like to find a small battery powered wireless device that I could
> install on a mailbox that would send a signal when the box is opened.
> I'd install a set of contacts to either open or close, and have the
> monitor in the house about 100 feet away. Any ideas appreciated.

Just google "wireless mailbox alarm" and you'll get tons of choices.

--
Bert Hyman St. Paul, MN bert@iphouse.com

755. Re: remote wireless device ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-04 00:14:53 UTC
From: Henry Kolesnik <kolesnik@nojunksbcglobal.net>
Message-ID: <0mEVl.18313$%54.15295@nlpi070.nbdc.sbc.com>
Source record: 2708

Thanks..
found one on eBay
http://cgi.ebay.com/Mail-Box-Remote-ALARM-MOTION-DETECTOR-WIRELESS-Mailbox_W0QQcmdZViewIte
mQQcategoryZ102536QQihZ005QQitemZ150329575535QQsalenotsupported
"Bert Hyman" <bert@iphouse.com> wrote in message
news:Xns9C1FA64B57A4DVeebleFetzer@216.250.184.7...
> In news:4wBVl.18292$%54.8830@nlpi070.nbdc.sbc.com "Henry Kolesnik"
> <kolesnik@nojunksbcglobal.net> wrote:
>
>> I'd like to find a small battery powered wireless device that I could
>> install on a mailbox that would send a signal when the box is
>> opened.
>> I'd install a set of contacts to either open or close, and have the
>> monitor in the house about 100 feet away. Any ideas appreciated.
>
> Just google "wireless mailbox alarm" and you'll get tons of choices.
>
> --
> Bert Hyman St. Paul, MN bert@iphouse.com

756. Re: LMX2326 & Homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-04 12:09:41 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <6bc50c25-5245-478b-a30d-bd2a0499e24b@s28g2000vbp.googlegroups.com>
Source record: 2709

On Jun 1, 1:55 am, EFR <kevin.v...@gmail.com> wrote:
> On May 31, 5:51 pm, raypsi <RBorow...@gmail.com> wrote:
>
>
>
> > On May 31, 3:34 am, EFR <kevin.v...@gmail.com> wrote:
>
> > > I'm in possestion of 4 LMX2326 PLL IC's and I'm looking for projects
> > > to use them in.
>
> > > I was thinking of building and designing an RF Signal Generator but
> > > I'm confused about the VCO. Is it possible to use the LMX2326 to drive
> > > a VCO built up of discrete components or do you have to work with an
> > > VCO IC like the ones from minicircuits?
>
> > Hey OM:
>
> > Sure discrete is ok, you are going to use GaAs fets i assume? The
> > caveat is feedback the correct signal level to Fin or NOT>Fin.
>
> > 73 OM
> > de n8zu
>
> I'll be using FET transistors, or experimenting. It's a learning
> project anyway since I'm heading into microwave terrority next year
> for my Master' degree. And I thought I'd get a head start by building
> and designing some projects such as PLL driven VCO.
>
> I'm now just looking for a good book on oscillator design. Any
> suggestions?

Hey OM:

Nothing like a book to use for information like this.
I would point you to Electronic Design News. The monthly rag that has
plenty more up to date articles and information with footnotes.
There's cornucopia of info just in the footnotes alone in every
article.

I remember one article, I like to catch so called knowledgeable people
with: a modulation domain analyzer. Nobody ever heard of it, one of
the best tools ever invented. Is what an spectrum analyzer is to a
time based sweep scope: as the modulation domain analyzer is to a
spectrum analyzer,

73 OM
de n8zu

757. Re: LMX2326 & Homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-04 21:19:28 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <fd8bbfdc-e4bc-4366-a14e-50705c19d31f@r34g2000vba.googlegroups.com>
Source record: 2710

On Jun 4, 5:09 am, raypsi <RBorow...@gmail.com> wrote:
> On Jun 1, 1:55 am, EFR <kevin.v...@gmail.com> wrote:
>
>
>
> > On May 31, 5:51 pm, raypsi <RBorow...@gmail.com> wrote:
>
> > > On May 31, 3:34 am, EFR <kevin.v...@gmail.com> wrote:
>
> > > > I'm in possestion of 4 LMX2326 PLL IC's and I'm looking for projects
> > > > to use them in.
>
> > > > I was thinking of building and designing an RF Signal Generator but
> > > > I'm confused about the VCO. Is it possible to use the LMX2326 to drive
> > > > a VCO built up of discrete components or do you have to work with an
> > > > VCO IC like the ones from minicircuits?
>
> > > Hey OM:
>
> > > Sure discrete is ok, you are going to use GaAs fets i assume? The
> > > caveat is feedback the correct signal level to Fin or NOT>Fin.
>
> > > 73 OM
> > > de n8zu
>
> > I'll be using FET transistors, or experimenting. It's a learning
> > project anyway since I'm heading into microwave terrority next year
> > for my Master' degree. And I thought I'd get a head start by building
> > and designing some projects such as PLL driven VCO.
>
> > I'm now just looking for a good book on oscillator design. Any
> > suggestions?
>
> Hey OM:
>
> Nothing like a book to use for information like this.
> I would point you to Electronic Design News. The monthly rag that has
> plenty more up to date articles and information with footnotes.
> There's cornucopia of info just in the footnotes alone in every
> article.
>
> I remember one article, I like to catch so called knowledgeable people
> with: a modulation domain analyzer. Nobody ever heard of it, one of
> the best tools ever invented. Is what an spectrum analyzer is to a

> time based sweep scope: as the modulation domain analyzer is to a
> spectrum analyzer,
>
> 73 OM
> de n8zu

I'd say there are some good oscillator design books out there, and there are also lots of articles from various magazines. "RF Design," "Microwave Journal," and "Microwaves and RF" all come to mind. I know that Ulrich Rohde has written some good articles on the subject. He's also written books on the subject, like "Microwave and Wireless Synthesizers." Dunno how good the book is, but I do respect the author. Seems like I have some photocopies of decent VCO articles out of "Wireless World," too.

Continuing the basenote drift: Dunno if it was ever marketed specifically under the name "modulation domain analyzer," but the the HP89410 series of Vector Signal Analyzers is extremely good at that sort of thing. The Agilent 89600 series is likewise very good at complex analysis tasks.

Cheers,
Tom

758. Re: LMX2326 & Homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-05 02:15:06 UTC
From: Dave M <masondg4499@comcast.net>
Message-ID: <a_-dncwfH4c24rXXnZ2dnUVZ_hydnZ2d@giganews.com>
Source record: 2711

"K7ITM" <k7itm@msn.com> wrote in message
news:fd8bbfdc-e4bc-4366-a14e-50705c19d31f@r34g2000vba.googlegroups.com...
On Jun 4, 5:09 am, raypsi <RBorow...@gmail.com> wrote:
> On Jun 1, 1:55 am, EFR <kevin.v...@gmail.com> wrote:
> > On May 31, 5:51 pm, raypsi <RBorow...@gmail.com> wrote:
>
> > > On May 31, 3:34 am, EFR <kevin.v...@gmail.com> wrote:
>
> > > > I'm in possestion of 4 LMX2326 PLL IC's and I'm looking for projects
> > > > to use them in.
>
> > > > I was thinking of building and designing an RF Signal Generator but
> > > > I'm confused about the VCO. Is it possible to use the LMX2326 to
> > > > drive
> > > > a VCO built up of discrete components or do you have to work with an
> > > > VCO IC like the ones from minicircuits?
>
> > > Hey OM:
>
> > > Sure discrete is ok, you are going to use GaAs fets i assume? The
> > > caveat is feedback the correct signal level to Fin or NOT>Fin.
>
> > > 73 OM
> > > de n8zu
>
> > I'll be using FET transistors, or experimenting. It's a learning
> > project anyway since I'm heading into microwave terrority next year
> > for my Master' degree. And I thought I'd get a head start by building
> > and designing some projects such as PLL driven VCO.
>
> > I'm now just looking for a good book on oscillator design. Any
> > suggestions?
>
> Hey OM:
>
> Nothing like a book to use for information like this.
> I would point you to Electronic Design News. The monthly rag that has
> plenty more up to date articles and information with footnotes.
> There's cornucopia of info just in the footnotes alone in every
> article.
>
> I remember one article, I like to catch so called knowledgeable people
> with: a modulation domain analyzer. Nobody ever heard of it, one of
> the best tools ever invented. Is what an spectrum analyzer is to a

> time based sweep scope: as the modulation domain analyzer is to a
> spectrum analyzer,
>
> 73 OM
> de n8zu

I'd say there are some good oscillator design books out there, and there are also lots of articles from various magazines. "RF Design," "Microwave Journal," and "Microwaves and RF" all come to mind. I know that Ulrich Rohde has written some good articles on the subject. He's also written books on the subject, like "Microwave and Wireless Synthesizers." Dunno how good the book is, but I do respect the author. Seems like I have some photocopies of decent VCO articles out of "Wireless World," too.

Continuing the basenote drift: Dunno if it was ever marketed specifically under the name "modulation domain analyzer," but the the HP89410 series of Vector Signal Analyzers is extremely good at that sort of thing. The Agilent 89600 series is likewise very good at complex analysis tasks.

Cheers,
Tom

A book that was recommended to me just a couple weeks ago is "RF and Microwave Transistor Oscillator Design", Grebennikov (Wiley, ISBN 0470025352). I haven't ordered a copy yet, but the recommendation came from a very knowledgeable designer.

--
Dave M
masondg44 at comcast dot net

One good thing about Alzheimer's; you get to meet new people every day.

759. Re: LMX2326 & Homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-05 05:41:56 UTC
From: devil103 <kevin.voet@gmail.com>
Message-ID: <9fb91d5c-6aae-43dc-b7e5-47910ab70613@c36g2000yqn.googlegroups.com>
Source record: 2712

On Jun 5, 4:15 am, "Dave M" <masondg4...@comcast.net> wrote:
> "K7ITM" <k7...@msn.com> wrote in message
>
> news:fd8bbfdc-e4bc-4366-a14e-50705c19d31f@r34g2000vba.googlegroups.com...
> On Jun 4, 5:09 am, raypsi <RBorow...@gmail.com> wrote:
>
>
>
> > On Jun 1, 1:55 am, EFR <kevin.v...@gmail.com> wrote:
> > > On May 31, 5:51 pm, raypsi <RBorow...@gmail.com> wrote:
>
> > > > On May 31, 3:34 am, EFR <kevin.v...@gmail.com> wrote:
>
> > > > > I'm in possestion of 4 LMX2326 PLL IC's and I'm looking for projects
> > > > > to use them in.
>
> > > > > I was thinking of building and designing an RF Signal Generator but
> > > > > I'm confused about the VCO. Is it possible to use the LMX2326 to
> > > > > drive
> > > > > a VCO built up of discrete components or do you have to work with an
> > > > > VCO IC like the ones from minicircuits?
>
> > > > Hey OM:
>
> > > > Sure discrete is ok, you are going to use GaAs fets i assume? The
> > > > caveat is feedback the correct signal level to Fin or NOT>Fin.
>
> > > > 73 OM
> > > > de n8zu
>
> > > I'll be using FET transistors, or experimenting. It's a learning
> > > project anyway since I'm heading into microwave terrority next year
> > > for my Master' degree. And I thought I'd get a head start by building
> > > and designing some projects such as PLL driven VCO.
>
> > > I'm now just looking for a good book on oscillator design. Any
> > > suggestions?
>
> > Hey OM:
>
> > Nothing like a book to use for information like this.
> > I would point you to Electronic Design News. The monthly rag that has
> > plenty more up to date articles and information with footnotes.
> > There's cornucopia of info just in the footnotes alone in every

> > article.
>
> > I remember one article, I like to catch so called knowledgeable people
> > with: a modulation domain analyzer. Nobody ever heard of it, one of
> > the best tools ever invented. Is what an spectrum analyzer is to a
> > time based sweep scope: as the modulation domain analyzer is to a
> > spectrum analyzer,
>
> > 73 OM
> > de n8zu
>
> I'd say there are some good oscillator design books out there, and
> there are also lots of articles from various magazines. "RF Design,"
> "Microwave Journal," and "Microwaves and RF" all come to mind. I know
> that Ulrich Rohde has written some good articles on the subject. He's
> also written books on the subject, like "Microwave and Wireless
> Synthesizers." Dunno how good the book is, but I do respect the
> author. Seems like I have some photocopies of decent VCO articles out
> of "Wireless World," too.
>
> Continuing the basenote drift: Dunno if it was ever marketed
> specifically under the name "modulation domain analyzer," but the the
> HP89410 series of Vector Signal Analyzers is extremely good at that
> sort of thing. The Agilent 89600 series is likewise very good at
> complex analysis tasks.
>
> Cheers,
> Tom
>
> A book that was recommended to me just a couple weeks ago is "RF and
> Microwave Transistor Oscillator Design", Grebennikov (Wiley, ISBN
> 0470025352). I haven't ordered a copy yet, but the recommendation came from
> a very knowledgeable designer.
>
> --
> Dave M
> masondg44 at comcast dot net
>
> One good thing about Alzheimer's; you get to meet new people every day.

I just bought that book by Grebennikov not 24 hours ago. I've quickly
scanned it through and it's a worthwhile addition to the library. It's
a little heavy on the math but has great examples and design
exercices. A serious knowledge of transistors and electronics is
required before starting in this book. Biasing and S-parameters aren't
explained (references given though).

And PCB layout isn't handled either, this is something of a drawback
if you ask me.

I'll be on the lookout for Ulrich Rohde's book.

760. Does anyone know anything about Voice above or over ip provider?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-06 13:43:59 UTC
From: gumbyridespokey <gumbyridespokey@gmail.com>
Message-ID: <547a2f1e-d012-44e8-b887-c10e39f5538d@h23g2000vbc.googlegroups.com>
Source record: 2713

I have been getting sounds in our house that seems to come from
electronic stuff around the house.
I also listened to what sounded like voices coming from behind the
computer?

We as a Family are stumped. We have written Bell Canada as well as
call there teck support, They don't understand what voice over ip
provider?

Someone has mentioned that this could be happening to get into banks ,
homes, anything really. If you hack could you please tell me how to
fix this.

As we said we are stumped?
Thanks
Dave
Toronto, Canada

761. Re: Does anyone know anything about Voice above or over ip provider?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-06 14:37:20 UTC
From: Jitt <tser827@yahoo.com>
Message-ID: <MPG.24941edd678f499e9896d9@news.bcsupernet.com>
Source record: 2714

In article <547a2f1e-d012-44e8-b887-
c10e39f5538d@h23g2000vbc.googlegroups.com>,
gumbyridespokey@gmail.com says...
> I have been getting sounds in our house that seems to come from
> electronic stuff around the house.
> I also listened to what sounded like voices coming from behind the
> computer?
>
> We as a Family are stumped. We have written Bell Canada as well as
> call there teck support, They don't understand what voice over ip
> provider?
>
> Someone has mentioned that this could be happening to get into banks ,
> homes, anything really. If you hack could you please tell me how to
> fix this.
>
> As we said we are stumped?
> Thanks
> Dave
> Toronto, Canada
>
Do you use dialup, with an internal modem? Modern
telephone systems helpfully give a voice message for a busy
signal. This would come through the sounder unit on the
modem card: voice in the computer!

762. Re: Does anyone know anything about Voice above or over ip provider?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-06 16:45:51 UTC
From: dplatt@radagast.org
Message-ID: <v2jqf6-b85.ln1@radagast.org>
Source record: 2715

> I have been getting sounds in our house that seems to come from
> electronic stuff around the house.
> I also listened to what sounded like voices coming from behind the
> computer?

Voices coming out of loudspeakers or other electronic equipment which contains them, can occur as the result of strong radio frequency signals. A strong enough RF signal, modulated by someone's voice, can be picked up by the household wiring (mains cables, telephone wire, speaker cables, etc.) and leak into the electronic equipment. Once inside the equipment, it can be accidentally "detected" (converted from radio frequencies back to audio) by semiconductors in the circuitry, amplified, and played out through the equipment's speakers.

Telephones, answering machines, baby monitors, powered subwoofers, computer speaker systems, etc. can all be prone to this. I suppose that an internal modem card in a PC - one with a loudspeaker - could pick up enough RF via its phone-line connection to start detecting audio in this way.

The strong RF signal might come from any of a number of sources... all probably fairly close to the house. Commercial AM transmitters can cause this, as can ham-radio transmitters, and CB radios. Here in the U.S., *legal* CB transmissions usually aren't strong enough to cause problems, but some CB operators use illegal high-power amplifiers that can boost the signal far enough to cause this sort of inadvertent pickup.

I don't know what the law is about this sort of problem in Canada. Here in the U.S., the FCC generally considers it to be a defect in the equipment which is picking up the RF - if a device isn't *supposed* to be a radio, it shouldn't *behave" like a radio, is their thinking. It's referred to as "undesired operation", and the "Part 15" notice which comes with most consumer electronic devices says that the device "must accept radio frequency interference, including that which causes undesired operation."

There are several ways to address the problem:

- Replace the RF-sensitive devices with better-designed devices that don't have the problem.

- Add RF filters or chokes to the phone lines, speaker cables, power lines, etc. to block the RF before it enters the equipment.

- Find the person or company whose transmitters are generating the RF, and ask them to stop (they'll probably refuse, as they often have

a perfectly good legal license to transmit).

- Live with it.

- Move.

If you can find which pieces of equipment are picking up the RF (and, in doing so, confirm that this is the problem) you can likely correct the problem with some clamp-on ferrite chokes, and/or a telephone-line RF filter (a DSL mini-filter may well do the job).

See http://www.palomar-engineers.com/RFI_Kit/rfi_kit.html for a kit of ferrite components specifically intended for this sort of household problem.

I'm not sure what connection there might be between the voices/noises you are hearing, and any "voice over IP provider". Your message isn't clear whether you actually have telephone service over IP, or whether you think someone else's voice-over-IP service is affecting you accidentally (very unlikely, in my opinion).

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

763. Seeking New FAQ/Intro Maintainers for rec.radio.amateur.*

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-07 06:05:01 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/recruitment-1-1244354701@panix.com>
Source record: 2716
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/recruitment
Revision: 1.1 2007/09/29 18:42:47
Posting-Frequency: posted monthly
URL: http://www.faqs.org/faqs/radio/personal-intro/

Changes followed by "|".

The rec.radio.info newsgroup, first established in 1993, has been
recently revived by an active moderation team. We are currently seeking
suitable information, FAQ, and bulletin articles from the entire
rec.radio.* newsgroup hierarchy for simultaneous cross-posting to our
newsgroup.

We are seeking a replacement maintainer for the following information
bulletin formerly posted to rec.radio.amateur.* (and currently archived
at http://www.faqs.org/faqs/radio/personal-intro/ ):

radio/personal-intro
Subject: Guide to the rec.radio Newsgroups
Maintainer: jeffreyh@Hawaii.Edu (Jeffrey Herman)
Last Posted: 9 Nov 2001 06:18:17 GMT
Posting-Frequency: 15th of each month

We are willing to provide any technical support necessary to get this
article updated and automatically posted again at a regular interval.
This would include establishing contact with the original maintainer for
any necessary permissions. We would prefer to seek a new, dedicated
maintainer at this time, rather than start auto-posting the original
article ourselves.

For more information about our newsgroup, see:

http://www.panix.com/~rram/usenet/rri/index.html

Please direct any comments, questions, or criticisms to
rec-radio-info-request@panix.com.
```

764. Need help.: OMNI-D 546 Receiving problems.!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-08 01:57:26 UTC
From: Rick <pissousky@yahoo.ca>
Message-ID: <h0hr6b$1i5p$1@adenine.netfront.net>
Source record: 2717
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Please help me to solve my omni-d problem.... It lost 90% of the receive side.I can barely hear signals that were usually 30 over 9.but what gets me it is that I flip the switch in the back to "receive" instead of leaving it in the transceive position and use the receive jack(not the pl-259) and it receive normally.I opened it and checked the relay(contacts) and they are ok....I took a wire antenna and jumped it to the "input signal pin" of the rx mixer and the reception cames back....any ideas guys.....

765. Astron Power supply mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-08 03:19:42 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <baa7b8ba-ebf3-423d-b890-3dbd401ae86e@l12g2000yqo.googlegroups.com>
Source record: 2718

I have been considerring modify an Astron 30 amp power supply to work at 26 volts. I was thinking maybe I could do this by changing the half bridge rectifier to a full bridge unit. Replacing the caps and modifying the regulator circuit. I want to use the power supply to power some 24 volt equipment and also maintain the charge on a 24 volt 100 amp/hr battery. I shamefully admit that I havent done much research on doing this but was hoping someone else already had and could save me some work.

Jimmie

766. Re: Need help.: OMNI-D 546 Receiving problems.!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-08 07:32:18 UTC
From: VK2KC <vk2kcjohn@gmail.com>
Message-ID: <683Xl.17063$y61.3474@news-server.bigpond.net.au>
Source record: 2719
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

I used to own an Omni D 546, and I did have some problems with it, but not a receive problem but an email to TenTech, got me going in the right direction, and actually the manual that is supplied gives a huge amount of info on fault finding etc. Perhaps you could try to find a copy?

73
john
"Rick" <pissousky@yahoo.ca> wrote in message
news:h0hr6b$1i5p$1@adenine.netfront.net...
> Please help me to solve my omni-d problem.... It lost 90% of the receive
> side.I can barely hear signals that were usually 30 over 9.but what gets
> me it is that I flip the switch in the back to "receive" instead of
> leaving it in the transceive position and use the receive jack(not the
> pl-259) and it receive normally.I opened it and checked the
> relay(contacts) and they are ok....I took a wire antenna and jumped it to
> the "input signal pin" of the rx mixer and the reception cames back....any
> ideas guys.....
>
>

767. Re: Need help.: OMNI-D 546 Receiving problems.!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-08 08:24:26 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <b4b07555-2a79-4219-8657-d742c2546d3e@h18g2000yqj.googlegroups.com>
Source record: 2720
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

On Jun 7, 9:57 pm, "Rick" <pissou...@yahoo.ca> wrote:
> Please help me to solve my omni-d problem.... It lost 90% of the receive
> side.I can barely hear signals that were usually 30 over 9.but what gets me
> it is that I flip the switch in the back to "receive" instead of leaving it
> in the transceive position and use the receive jack(not the pl-259) and it
> receive normally.I opened it and checked the relay(contacts) and they are
> ok....I took a wire antenna and jumped it to the "input signal pin" of the
> rx mixer and the reception cames back....any ideas guys.....

How did you check the relay contacts? My neighbor, now SK, had one
with a problem that sounds like yours and it was the relay. You cant
always tell just by looking.

Jimmie

768. Re: Astron Power supply mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-08 08:50:10 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <2fc58de6-b684-47d4-9d88-6d9dbdfc0f70@z9g2000yqi.googlegroups.com>
Source record: 2721

On Jun 7, 11:19 pm, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> I have been considerring modify an Astron 30 amp power supply to work
> at 26 volts. I was thinking maybe I could do this by changing the half
> bridge rectifier to a full bridge unit. Replacing the caps and
> modifying the regulator circuit. I want to use the power supply to
> power some 24 volt equipment and also maintain the charge on a 24 volt
> 100 amp/hr battery. I shamefully admit that I havent done much
> research on doing this but was hoping someone else already had and
> could save me some work.
>
> Jimmie

oops, now I see why that wont work. I guess I am going to have to do
this from scratch

Jimmie

769. Re: Astron Power supply mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-08 10:50:10 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <21164f12-4db1-48e5-aa15-b494fa200da4@e20g2000vbc.googlegroups.com>
Source record: 2722

>
> oops, now I see why that wont work. I guess I am going to have to do
> this from scratch
>
> Jimmie

Well OM:

Maybe and maybe not.

A battery charger IC would be a lot better than a regulator, like a
MAX713, which is for NiMh batteries, or the UC3906.
So if that's from scratch I guess you are right.

73 OM
de n8zu

770. Re: Astron Power supply mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-08 12:46:22 UTC
From: "Larry Gauthier (K8UT)" <MyCallsign@ARRL.NET>
Message-ID: <HK7XI.30868$VL5.19447@newsfe22.iad>
Source record: 2723

Sounds like a lot of work. Have you considered buying another Astron supply
and operating them in series?

Astron supplies can be used in series (double the voltage) and some in
parallel (like the PS-50, double the current).
--
-larry
K8UT
"JIMMIE" <JIMMIEDEE123@YAHOO.COM> wrote in message
news:baa7b8ba-ebf3-423d-b890-3dbd401ae86e@l12g2000yqo.googlegroups.com...
>I have been considerring modify an Astron 30 amp power supply to work
> at 26 volts. I was thinking maybe I could do this by changing the half
> bridge rectifier to a full bridge unit. Replacing the caps and
> modifying the regulator circuit. I want to use the power supply to
> power some 24 volt equipment and also maintain the charge on a 24 volt
> 100 amp/hr battery. I shamefully admit that I havent done much
> research on doing this but was hoping someone else already had and
> could save me some work.
>
> Jimmie

771. Re: Does anyone know anything about Voice above or over ip provider?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-08 13:07:36 UTC
From: "Larry Gauthier (K8UT)" <MyCallsign@ARRL.NET>
Message-ID: <v28Xl.30871$VL5.12288@newsfe22.iad>
Source record: 2724

Dave,

Give us a little more information:

- are the sounds continuous? or only happen at certain times of the day?
- is it really voices? what does it sound like?
- "seems to come from electronic stuff around the house?" What kinds of stuff? Only the PC?

- do you hear the sound even when the "stuff" is turned off? Some very strong signals can by heard through stereo speakers even if the stereo is not running.
- "coming from BEHIND the computer?" In other words, not from the computer's speakers but somewhere else on the computer?
- How is your PC connected to the Internet: dial-up over phone lines? Cable TV modem? Phone company DSL?

A few troubleshooting hints:

Some people living near Radio or TV stations can hear those stations in electronic devices (phones, stereos, computer speakers). IF the sounds are continuous, that may be the source.

If the sounds are not continuous, but only heard once in a while, the sounds are more likely coming from some intermittent source. Perhaps a taxi cab or trucking company radio, a local CB or Ham radio operator... something like that.

Can you actually hear a voice, or does it sound like "Donald Duck?" If the voice is intelligible, it is more likely a CB operator running AM (amplitude modulation, the dominant mode on CB); whereas if it sounds like "Donald Duck" talking, it may be a Ham Radio running SSB (single sideband, the dominant mode on amateur radio).

As Dave Pratt mentioned in his excellent reply, there are ways to filter out unwanted stray RF energy.... but first you need to understand the source and how/where it is getting into your "stuff".

In my opinion, there is no way that VoIP (Voice over IP) could cause this problem... for a whole bunch of geeky reasons. You need to look somewhere else for the culprit.
--
-larry
K8UT
"gumbyridespokey" <gumbyridespokey@gmail.com> wrote in message
news:547a2f1e-d012-44e8-b887-c10e39f5538d@h23g2000vbc.googlegroups.com...
>I have been getting sounds in our house that seems to come from

> electronic stuff around the house.
> I also listened to what sounded like voices coming from behind the
> computer?
>
> We as a Family are stumped. We have written Bell Canada as well as
> call there teck support, They don't understand what voice over ip
> provider?
>
> Someone has mentioned that this could be happening to get into banks ,
> homes, anything really. If you hack could you please tell me how to
> fix this.
>
> As we said we are stumped?
> Thanks
> Dave
> Toronto, Canada

772. Re: Astron Power supply mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-08 16:18:53 UTC
From: JB <nospam@goofball.net>
Message-ID: <NRaXl.1395$u86.1392@nwrddc01.gnilink.net>
Source record: 2725

"raypsi" <RBorowiak@gmail.com> wrote in message
news:21164f12-4db1-48e5-aa15-b494fa200da4@e20g2000vbc.googlegroups.com...
>
> >
> > oops, now I see why that wont work. I guess I am going to have to do
> > this from scratch
> >
> > Jimmie
>
> Well OM:
>
> Maybe and maybe not.
>
> A battery charger IC would be a lot better than a regulator, like a
> MAX713, which is for NiMh batteries, or the UC3906.
> So if that's from scratch I guess you are right.
>
> 73 OM
> de n8zu

You can likely bypass the entire regulator and pick off 25 v raw from the filter bank. First thing to do would be to get the schematic. You would start by removing the regulator/crowbar anyway and swap in a perf board. I don't know what the voltage rating is on the filter bank though. Schematics are one page simple and out there on the Net. There are some other mods out there with descriptions. It is just a 723 comparator.

773. Re: Need help.: OMNI-D 546 Receiving problems.!

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-08 17:50:50 UTC
From: You <you@shadow.orgs>
Message-ID: <you-86887F.09504808062009@unknown.usenetserver.com>
Source record: 2726
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

In article <h0hr6b$1i5p$1@adenine.netfront.net>,
"Rick" <pissousky@yahoo.ca> wrote:

> Please help me to solve my omni-d problem.... It lost 90% of the receive
> side.I can barely hear signals that were usually 30 over 9.but what gets me
> it is that I flip the switch in the back to "receive" instead of leaving it
> in the transceive position and use the receive jack(not the pl-259) and it
> receive normally.I opened it and checked the relay(contacts) and they are
> ok....I took a wire antenna and jumped it to the "input signal pin" of the
> rx mixer and the reception cames back....any ideas guys.......

Grab the Schematic, ands start looking where the Transceive Input and
the Receive Only Input connect and then follow the Transceive line back
and test each component clear back to the connector.... You will likely
find it in the contacts, but it may be a PIN Diode Switch, or T/R Relay
problem depending on how the radio was designed...

774. The Scout kit

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-10 01:12:13 UTC
From: Bill M <radioexray@geemail.com>
Message-ID: <h0n19g02mma@news1.newsguy.com>
Source record: 2727

http://www.qrpkits.com/scoutregen.html

I received mine and got it assembled this afternoon. Pretty nifty little radio and easy to build. No problems at all. The instruction manual gets an A+++. They did short me one part - A 1 meg/1/4w resistor.

I had just started my Kitchin rcvr when this one came out. After a few days of counting my coins I decided to go for it. Figured it would be fun to compare with my homebrew.
http://www.arrl.org/tis/info/pdf/95hb1768.pdf

The little rig works great. Frankly I think the front end is better than mine. Mine was crippled without a BCB trap to notch out my local station. This one has no trap and the local is not a bother. It also seems like its not as prone to overload as my circuit.

I thought the no-vernier tuning capacitor would be a big annoyance but its not so bad. The electronic fine tuning works great and the regeneration behaves well. I'm no fan of little tiny knobs but what the heck.

Gonna do some review on the front end of mine now that I see it could be better.

The kit gets a thumbs up from me. Total assembly time with the coil winding, decals, etc was about 4-5 leisurely hours.

-Bill WX4A

775. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-10 01:21:07 UTC
From: amdx <amdx@knology.net>
Message-ID: <c8740$4a2f0a87$18d6b40c$28826@KNOLOGY.NET>
Source record: 2728
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

>>A mismatch can cause ghosting in an analog TV.
>>What does ghosting do to a digital TV signal?

Just as a point of interest (to me at least) I grew up within 3 blocks of
an airport, it
was a several times a day occurance to have the picture flutter as an
airplane flew by.
Mike

776. FOR GAMERS ONLY

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-11 02:16:20 UTC
From: bruteman <brutemann@gmail.com>
Message-ID: <e29d222d-5bd4-40c4-8751-ff82de14d4e4@y33g2000prg.googlegroups.com>
Source record: 2729

---

http://gpoi.mybrute.com/

Let's get it on!

Insert a name to create your own Brute.

You will be able to fight against other Brutes in the arena.

Gain experience and fight tough in the ranking to become...
THE BRUTE!

777. Re: FOR GAMERS ONLY (hence not relevant to this NG)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-11 10:55:38 UTC
From: Highland Ham <rfburns@allbands.net>
Message-ID: <-7qdnUvyuP04ya_XnZ2dnUVZ8nudnZ2d@pipex.net>
Source record: 2731

bruteman wrote:
> --
>
> http://gpoi.mybrute.com/
>
> --
>
> Let's get it on!
>
> Insert a name to create your own Brute.
>
> You will be able to fight against other Brutes in the arena.
>
> Gain experience and fight tough in the ranking to become...
> THE BRUTE!
==========
There we go again !
This NG is increasingly contaminated with totally off-subject messages.

Frank GM0CSZ / KN6WH

778. Re: Does anyone know anything about Voice above or over ip provider?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-12 04:34:09 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <89d34c7d-1937-4e92-a08b-08300cdf4cba@i6g2000yqj.googlegroups.com>
Source record: 2730

hey OM:

I know the fix;get about 100ft roll of chicken wire. around your computer built a small closet sized room with a door all from the chicken wire. when you bring in the power lines put emi filters and hash filters on the AC line. when bringing in the coax cable to the modem put clamp on ferrite filters over the coax. use the shortest possible lan cable to the computer from the modem. and then make sure you ground the chicken wire to a good cold water pipe

another thing voip phone service can't be demodulated with anything but a voip box. the modulation techniques they are using can't demodulated except with a voip box. And when they are in RF form the cable modem has to demodulate the cable signals.

73 OM

de n8zu

On Jun 8, 9:07 am, "Larry Gauthier \(K8UT\)" <MyCalls...@ARRL.NET>
wrote:
> Dave,
>
> Give us a little more information:
>
> - are the sounds continuous? or only happen at certain times of the day?
> - is it really voices? what does it sound like?
> - "seems to come from electronic stuff around the house?" What kinds of
> stuff? Only the PC?
>
> - do you hear the sound even when the "stuff" is turned off? Some very
> strong signals can by heard through stereo speakers even if the stereo is
> not running.
> - "coming from BEHIND the computer?" In other words, not from the computer's
> speakers but somewhere else on the computer?
> - How is your PC connected to the Internet: dial-up over phone lines? Cable
> TV modem? Phone company DSL?
>
> A few troubleshooting hints:
>
> Some people living near Radio or TV stations can hear those stations in
> electronic devices (phones, stereos, computer speakers). IF the sounds are
> continuous, that may be the source.
>
> If the sounds are not continuous, but only heard once in a while, the sounds
> are more likely coming from some intermittent source. Perhaps a taxi cab or

> trucking company radio, a local CB or Ham radio operator... something like
> that.
>
> Can you actually hear a voice, or does it sound like "Donald Duck?" If the
> voice is intelligible, it is more likely a CB operator running AM (amplitude
> modulation, the dominant mode on CB); whereas if it sounds like "Donald
> Duck" talking, it may be a Ham Radio running SSB (single sideband, the
> dominant mode on amateur radio).
>
> As Dave Pratt mentioned in his excellent reply, there are ways to filter out
> unwanted stray RF energy.... but first you need to understand the source and
> how/where it is getting into your "stuff".
>
> In my opinion, there is no way that VoIP (Voice over IP) could cause this
> problem... for a whole bunch of geeky reasons. You need to look somewhere
> else for the culprit.
> --
> -larry
> K8UT"gumbyridespokey" <gumbyridespo...@gmail.com> wrote in message
>
> news:547a2f1e-d012-44e8-b887-c10e39f5538d@h23g2000vbc.googlegroups.com...
>
> >I have been getting sounds in our house that seems to come from
> > electronic stuff around the house.
> > I also listened to what sounded like voices coming from behind the
> > computer?
>
> > We as a Family are stumped. We have written Bell Canada as well as
> > call there teck support, They don't understand what voice over ip
> > provider?
>
> > Someone has mentioned that this could be happening to get into banks ,
> > homes, anything really. If you hack could you please tell me how to
> > fix this.
>
> > As we said we are stumped?
> > Thanks
> > Dave
> > Toronto, Canada

779. Re: FOR GAMERS ONLY (hence not relevant to this NG)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-12 14:17:31 UTC
From: Bert Hyman <bert@iphouse.com>
Message-ID: <Xns9C285E492E316VeebleFetzer@216.250.184.7>
Source record: 2732

In news:-7qdnUvyuP04ya_XnZ2dnUVZ8nudnZ2d@pipex.net Highland Ham
<rfburns@allbands.net> wrote:

> There we go again !
> This NG is increasingly contaminated with totally off-subject
> messages.

I wonder why people feel compelled to repost an offensive article in its
entirety just to complain about being offended.

--
Bert Hyman St. Paul, MN bert@iphouse.com

780. Re: Does anyone know anything about Voice above or over ip provider?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-12 19:45:53 UTC
From: You <you@shadow.orgs>
Message-ID: <you-5229E1.11455012062009@unknown.usenetserver.com>
Source record: 2733

In article
<89d34c7d-1937-4e92-a08b-08300cdf4cba@i6g2000yqj.googlegroups.com>,
raypsi <RBorowiak@gmail.com> wrote:

> another thing voip phone service can't be demodulated with anything
> but a voip box. the modulation techniques they are using can't
> demodulated except with a voip box. And when they are in RF form the
> cable modem has to demodulate the cable signals.

BS... there are plenty of Computer Apps that can demod VoIP streams,
and None of those are VoIP Boxes......

781. Re: FOR GAMERS ONLY (hence not relevant to this NG)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-12 23:55:34 UTC
From: "Dr. Barry L. Ornitz" <BLOrnitz48@charter.net>
Message-ID: <ZVBYI.8$jI6.4@newsfe11.iad>
Source record: 2734

"Highland Ham" <rfburns@allbands.net> wrote in message
news:-7qdnUvyuP04ya_XnZ2dnUVZ8nudnZ2d@pipex.net...
> This NG is increasingly contaminated with totally off-subject messages.
>
> Frank GM0CSZ / KN6WH

Why complain here (and even quote the offending message again)? The spammer does not even read the newsgroups he posts to, so your complaint just wastes bandwidth. Why not learn to read the message headers? Then you can complain to system administrators who just might shut the spammer down. I always include Google, but I have yet to ever see them do anything.

In this particular case, I sent a complaint to:

Re: brutemann@gmail.com (Apparent email address where the spammer wants return mail)
To: abuse@google.com
groups-abuse@google.com

Re: [119.94.37.8] (IP address where message originated)
To: abuse@pldt.com
postmaster@pldt.com.ph
customercare@pldt.com
abuse@uu.net
postmaster@pldt.com
abuse-mail@verizonbusiness.com
bizsol@pldt.com.ph
abuse@pldt.net

Re: http://gpoi.mybrute.com/ (Website advertised in spam)
To: postmaster@motion-twin.com
noc@multi-visp.com
geoffroy@secr.fr

782. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-13 00:53:49 UTC
From: stratus46@yahoo.com
Message-ID: <24d3eea0-2907-4cb1-a26e-2135cfe48e4b@y9g2000yqg.googlegroups.com>
Source record: 2735
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

On May 31, 7:31 am, Usual Suspect <re...@thegroup.net> wrote:
> > I've had one on the roof since Dec 2004 in 90274 35 miles from Mt
> > Wilson split 4 ways with no preamps. It's a fine little UHF
antenna
> > and while they say it can do upper VHF, I have serious doubts.
I'll
> > find out for certain in 2 weeks.
> > G²
>
> Thanks, G, for answering the question *asked*. I appreciate it. :-)
>
> The issue re. rights may be interesting to some, but was not asked.
(Man, the
> signal-to-noise ration on USENET is *so* low...)
>
> If you think of it, please post a follow-up in 2 weeks.
>
> Thanks.
> --
> Al, the usual

Well, it's the 'big day' and while we have an excellent antenna at
work, I didn't think the little 'SquareShooter' would be adequate for
VHF-hi (channels 7-13) DTV. I brought home the spectrum analyzer to
check out the signal before I tried a re-scan. So far 2 of the 4 VHF-
hi have completed the change over. KABC-7 and KCAL-9 are in their new
homes. The spectrum analyzer showed better than 20dB carrier to noise
which should be OK. I then connected to the computer tuner and it
works very well. I must say I am totally surprised about that as the
analog stations 7-13 were SO weak as to not even SEE a locked umage
from analog. As it is, it appears to be as good as the UHF DTV. If Fox
11 and KCOP-13 are as good as 7 and 9 I won't need to change a thing.

G²

783. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-13 06:56:40 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <J4IYI.7361$mX2.4180@newsfe05.iad>
Source record: 2736
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

<stratus46@yahoo.com> wrote in message
news:24d3eea0-2907-4cb1-a26e-2135cfe48e4b@y9g2000yqg.googlegroups.com...

So far 2 of the 4 VHF-
hi have completed the change over. KABC-7 and KCAL-9 are in their new
homes. The spectrum analyzer showed better than 20dB carrier to noise
which should be OK. I then connected to the computer tuner and it
works very well. I must say I am totally surprised about that as the
analog stations 7-13 were SO weak as to not even SEE a locked umage
from analog. As it is, it appears to be as good as the UHF DTV. If Fox
11 and KCOP-13 are as good as 7 and 9 I won't need to change a thing.

==========

I got KABC but, so far, no KCAL. I'm in San Diego, so my situation will be
variable, depending on the ducting. I think I've lost KCBS, since they
moved to KCAL's old channel, 43, which has a local LPTV station sitting on
it. I still have some more antenna tricks to try. KCAL on 43 was always
very "iffy."

I've also lost KCET; There's a Mexican station (full power) on 28. KOCE
generally good.

784. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-13 08:08:24 UTC
From: stratus46@yahoo.com
Message-ID: <0bbb2bf3-3152-484b-8f6a-3ab5cba5e612@f19g2000yqh.googlegroups.com>
Source record: 2737
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

On Jun 12, 11:56 pm, "Sal M. Onella" <salmone...@food.poisoning.org>
wrote:
> <stratu...@yahoo.com> wrote in message
>
> news:24d3eea0-2907-4cb1-
a26e-2135cfe48e4b@y9g2000yqg.googlegroups.com...
>
> So far 2 of the 4 VHF-
> hi have completed the change over. KABC-7 and KCAL-9 are in their
new
> homes. The spectrum analyzer showed better than 20dB carrier to
noise
> which should be OK. I then connected to the computer tuner and it
> works very well. I must say I am totally surprised about that as
the
> analog stations 7-13 were SO weak as to not even SEE a locked umage
> from analog. As it is, it appears to be as good as the UHF DTV. If
Fox
> 11 and KCOP-13 are as good as 7 and 9 I won't need to change a
thing.
>
> ====================================
>
> I got KABC but, so far, no KCAL. I'm in San Diego, so my
situation will be
> variable, depending on the ducting. I think I've lost KCBS, since
they
> moved to KCAL's old channel, 43, which has a local LPTV station
sitting on
> it. I still have some more antenna tricks to try. KCAL on 43 was
always
> very "iffy."
>
> I've also lost KCET; There's a Mexican station (full power) on 28.
 KOCE
> generally good.

My optimism was premature. KABC is better than I expected and KCAL was
marginal. KTTV-11 Fox is way down in the mud and KCOP-13 is worse than
11, neither of which is usable at all. Keep in mind this is that
little SquareShooter (without the preamp) which is good for UHF isn't
going to make it for VHF hi. Oh well, some more cable along with a UHF/
VHF splitter (combiner) and that big Winegard in the garage will

hopefully cure it.

At 12:30am 6-13-09 KWHY-22 analog was still on the air but all that's left are a few low power analogs - as they told us.

G²

785. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-13 08:39:01 UTC
From: stratus46@yahoo.com
Message-ID: <913746fa-b991-474a-b3b1-31745887fcbb@b9g2000yqm.googlegroups.com>
Source record: 2738
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

On Jun 13, 1:08 am, stratu...@yahoo.com wrote:
>
> At 12:30am 6-13-09 KWHY-22 analog was still on the air but all
that's
> left are a few low power analogs - as they told us.
>
> G²

Dummy me, I just remembered KWHY is one of the LA nightlight stations
that will stay on another month with an infomercial on how to get your
TV converted.

G²

786. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-13 17:10:24 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <nmm7355i2i2qd4bp8mnri4m2gl60pqaef7@4ax.com>
Source record: 2739
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

On Sat, 13 Jun 2009 01:08:24 -0700 (PDT), stratus46@yahoo.com wrote:

>Oh well, some more cable along with a UHF/
>VHF splitter (combiner) and that big Winegard in the garage will
>hopefully cure it.

By this little snippet of what was intended as an aside may, in fact,
be your solution for VHF. Given your predicament of "code" (arbitrary
or otherwise), you can put the cable to work.

The solution is called a "Franklin Antenna." It would be disguised as
an antenna cable (or telephone cable, or power line, or other
innocuous wire) that trails up (to something innocuous), but never
connects (who is going to look? and if they did, it could always be a
dummy connection).

A Franklin antenna is a stacked, gain antenna that is very colinear
(hence the cable motif). These are most often described on the Web
for home wi-fi or bluetooth applications, but with scaling you can
bring them back down into the TV VHF band. A quick search gives:
http://www.para.org.ph/membersarticles/DU1ANV/Development%20of%20Collinear%20Antennas_Matching%20and%20Feeding%20Techniques%20-%2021.pdf
which on page 11 gives a pictorial representation (I can't say I vouch
for the entire paper, but it is representative of the topic).

73's
Richard Clark, KB7QHC

787. ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-13 18:03:39 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <JLWdnYFglb9gdK7XnZ2dnUVZ_sSdnZ2d@giganews.com>
Source record: 2740
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

Does anybody have or know where to get a utility to convert from ExpressPCB file format to a standard Gerber file? If not any info on the file format itself?

--
Regards;

Leland C. Scott
KC8LDO

"The most reliable components are
the ones you leave out."

By Gordon Bell, father of the
minicomputer at DEC.

788. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-13 19:07:20 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <INSYI.740928$yE1.253509@attbi_s21>
Source record: 2741
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

"Leland C. Scott" <kc8ldo@arrl.net> wrote in message
news:JLWdnYFglb9gdK7XnZ2dnUVZ_sSdnZ2d@giganews.com...
> Does anybody have or know where to get a utility to convert from
> ExpressPCB file format to a standard Gerber file? If not any info on the
> file format itself?
>
Yup. You can pay Express PCB for the file. (No utility) $75 the last time I
bought one.

W4ZCB

789. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-13 19:36:40 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <9YKdnf9qLL1TYq7XnZ2dnUVZ_q2dnZ2d@giganews.com>
Source record: 2742
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

"Harold E. Johnson" <W4ZCB@mchsi.com> wrote in message
news:INSYl.740928$yE1.253509@attbi_s21...
>
> "Leland C. Scott" <kc8ldo@arrl.net> wrote in message
> news:JLWdnYFglb9gdK7XnZ2dnUVZ_sSdnZ2d@giganews.com...
>> Does anybody have or know where to get a utility to convert from
>> ExpressPCB file format to a standard Gerber file? If not any info on the
>> file format itself?
>>
> Yup. You can pay Express PCB for the file. (No utility) $75 the last time
> I bought one.

That's not going to happen. I know I can get some reverse engineering
software that will import the layout as a graphic then trace over it using
the PCB layout software to generate standard Gerber files. I'm looking for
something easy and I'm not paying them $75 a pop for each small board to
convert.

I also found out there maybe some utilities out, still looking, there that
can convert from an exported PDF, or EPS file, to a Gerber format too.
Getting a PDF printer driver is easy. Use the driver when printing out a
copy of the board layout.

--
Regards;

Leland C. Scott
KC8LDO

"Brilliance is typically the act of an
individual, but incredible stupidity
can usually be traced to an
organization."

Jon Bentley

790. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-14 00:28:56 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <m4f835dfmegcbqru1r00j56lqfprlvml7s@4ax.com>
Source record: 2743
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

On Sat, 13 Jun 2009 10:10:24 -0700, Richard Clark <kb7qhc@comcast.net>
wrote:

(...)
>The solution is called a "Franklin Antenna." It would be disguised as
>an antenna cable (or telephone cable, or power line, or other
>innocuous wire) that trails up (to something innocuous), but never
>connects (who is going to look? and if they did, it could always be a
>dummy connection).
>
>A Franklin antenna is a stacked, gain antenna that is very colinear
>(hence the cable motif). These are most often described on the Web
>for home wi-fi or bluetooth applications, but with scaling you can
>bring them back down into the TV VHF band. A quick search gives:
>http://www.para.org.ph/membersarticles/DU1ANV/Development%20of%20Collinear%20Antennas_Mat
ching%20and%20Feeding%20Techniques%20-%2021.pdf
>which on page 11 gives a pictorial representation (I can't say I vouch
>for the entire paper, but it is representative of the topic).
>
>73's
>Richard Clark, KB7QHC

The only problem is that a Franklin antenna is usually vertically
polarized. TV is horizontal.... well some station have a vertically
polarized component, but it's mostly horizontal.
<http://www.tvtechnology.com/article/68820>
The Franklin antenna is not very wide band, covering perhaps a few UHF
channels, but certainly not the entire UHF TV band.

Topic drift: Franklin or AMOS antennas for Wi-Fi. NEC2 deck is under
the "main" page and is easily scaled for your favorite TV channel.
<http://802.11junk.com/jeffl/antennas/AMOS-7/index.html>
<http://802.11junk.com/jeffl/antennas/AMOS-5/index.html>

I don't have photos of the "disguise" TV antenna I installed on top of
a 175ft redwood tree. It was vertically polarized, crammed into a PVC
pipe, and filled with urethane foam (fence post compound). 20dB gain
wide band GaAsFET amp at the base. It was painted brown, to match the
tree trunk.

Performance was a disaster. There wasn't enough gain so most stations
were noisy. With an omnidirectinal pattern, it did a superior job of
converting reflections from the surrounding mountains, into obnoxious
and irritating ghosts. 4 tries, and no luck.

The plan was to install a pully near the top of the tree, and use a rope to raise and lower verious experiments. Unfortunately, I used a rope that did not do well in the sun. After about a year of trial and error, the rope crumbled. The pully is still in the tree and can probably be used again.

As for other disguise antennas, I've done some tinkering characterizing various road signs for operation as antennas. The aluminum sign is a tolerable radiator, but the galvanized steel support is a problem. I've also seen all manner of urethane sculptures, designed to resemble a tree, cactus, building materials, lamps, boulders, etc, each with an antenna behind or inside. Also fiberglass panels for hiding antennas in the sidewalk.

I've also crammed wi-fi repeaters inside a plastic owl. I've disguised a wi-fi antenna by making it look like a giant bird nest. If the neighbors asked, I told the owner to tell them it was a Roc nest. <http://en.wikipedia.org/wiki/Roc_(mythology)>
For HF, I've loaded into the rain gutters, installed chicken wire under the carpeting for a ground, and strung wires between telephone poles.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

791. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-14 02:40:07 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <h-KdncQ1TbGa_qnXnZ2dnUVZ_ohi4p2d@web-ster.com>
Source record: 2744
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

On Sat, 13 Jun 2009 15:36:40 -0400, Leland C. Scott wrote:

> "Harold E. Johnson" <W4ZCB@mchsi.com> wrote in message
> news:INSYl.740928$yE1.253509@attbi_s21...
>>
>> "Leland C. Scott" <kc8ldo@arrl.net> wrote in message
>> news:JLWdnYFglb9gdK7XnZ2dnUVZ_sSdnZ2d@giganews.com...
>>> Does anybody have or know where to get a utility to convert from
>>> ExpressPCB file format to a standard Gerber file? If not any info on
>>> the file format itself?
>>>
>> Yup. You can pay Express PCB for the file. (No utility) $75 the last
>> time I bought one.
>
> That's not going to happen. I know I can get some reverse engineering
> software that will import the layout as a graphic then trace over it
> using the PCB layout software to generate standard Gerber files. I'm
> looking for something easy and I'm not paying them $75 a pop for each
> small board to convert.
>
> I also found out there maybe some utilities out, still looking, there
> that can convert from an exported PDF, or EPS file, to a Gerber format
> too. Getting a PDF printer driver is easy. Use the driver when printing
> out a copy of the board layout.

Reverse the "Express" and the "PCB" and you'll find a really nice little
company that will take Gerber files and make boards for you. Eagle PCB
is free for small two-layer boards, includes schematic capture, and works
well once you get your brain wrapped around their way of doing things.

http://www.pcbexpress.com/

--
http://www.wescottdesign.com

792. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-14 05:55:46 UTC
From: stratus46@yahoo.com
Message-ID: <dc8ac04e-cddb-4911-913c-37900132cf19@i6g2000yqj.googlegroups.com>
Source record: 2745
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

On Jun 13, 10:10 am, Richard Clark <kb7...@comcast.net> wrote:
> On Sat, 13 Jun 2009 01:08:24 -0700 (PDT), stratu...@yahoo.com
wrote:
> >Oh well, some more cable along with a UHF/
> >VHF splitter (combiner) and that big Winegard in the garage will
> >hopefully cure it.
>
> By this little snippet of what was intended as an aside may, in
fact,
> be your solution for VHF. Given your predicament of
"code" (arbitrary
> or otherwise), you can put the cable to work.
>
> The solution is called a "Franklin Antenna." It would be disguised
as
> an antenna cable (or telephone cable, or power line, or other
> innocuous wire) that trails up (to something innocuous), but never
> connects (who is going to look? and if they did, it could always
be a
> dummy connection).
>
> A Franklin antenna is a stacked, gain antenna that is very colinear
> (hence the cable motif). These are most often described on the Web
> for home wi-fi or bluetooth applications, but with scaling you can
> bring them back down into the TV VHF band. A quick search
gives:http://www.para.org.ph/membersarticles/DU1ANV/Development%20of
%20Coll...
> which on page 11 gives a pictorial representation (I can't say I
vouch
> for the entire paper, but it is representative of the topic).
>
> 73's
> Richard Clark, KB7QHC

I hung the spectrum analyzer on the Winegard all channel antenna in
the rafters of the garage. The VHF channels are strong and free of
response 'bumps' (meaning no serious multipath) and the UHF may be
better than the squareshooter on the roof. Tomorrow I shoot a hole in
the stucco wall to get the new RG-6 coax (crazy guy at Torrance
Electronics sold me 100 ft for $9) pulled in to the splitter to feed
the computers and STB. It looks like it will be good.

G²

793. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-14 12:30:19 UTC
From: Leon <leon355@btinternet.com>
Message-ID: <a3dcb9c9-811e-486a-8c74-d0791c8c4e0f@y10g2000prc.googlegroups.com>
Source record: 2746
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

On 13 June, 20:36, "Leland C. Scott" <kc8...@arrl.net> wrote:
> "Harold E. Johnson" <W4...@mchsi.com> wrote in
messagenews:INSYl.740928$yE1.253509@attbi_s21...
>
>
>
> > "Leland C. Scott" <kc8...@arrl.net> wrote in message
> >news:JLWdnYFglb9gdK7XnZ2dnUVZ_sSdnZ2d@giganews.com...
> >> Does anybody have or know where to get a utility to convert from
> >> ExpressPCB file format to a standard Gerber file? If not any info on the
> >> file format itself?
>
> > Yup. You can pay Express PCB for the file. (No utility) $75 the last time
> > I bought one.
>
> That's not going to happen. I know I can get some reverse engineering
> software that will import the layout as a graphic then trace over it using
> the PCB layout software to generate standard Gerber files. I'm looking for
> something easy and I'm not paying them $75 a pop for each small board to
> convert.
>
> I also found out there maybe some utilities out, still looking, there that
> can convert from an exported PDF, or EPS file, to a Gerber format too.
> Getting a PDF printer driver is easy. Use the driver when printing out a
> copy of the board layout.
>
> --
> Regards;
>
> Leland C. Scott
> KC8LDO
>
> "Brilliance is typically the act of an
> individual, but incredible stupidity
> can usually be traced to an
> organization."
>
> Jon Bentley

Use Advanced Circuits. Their PCB Artist software is much better than
Express PCB's (it's actually a special version of Easy-PC) and you get
the Gerbers free with a second order for the same board, IIRC.

Leon

794. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-14 14:32:26 UTC
From: stan <tsanford@nf.sympatico.ca>
Message-ID: <a65b8b25-51d6-4b31-b8e0-bd84c78417f7@g15g2000pra.googlegroups.com>
Source record: 2747
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

On Jun 9, 11:21 pm, "amdx" <a...@knology.net> wrote:
> >>A mismatch can cause ghosting in an analog TV.
> >>What does ghosting do to a digital TV signal?
>
> Just as a point of interest (to me at least) I grew up within 3 blocks of
> an airport, it
> was a several times a day occurance to have the picture flutter as an
> airplane flew by.
> Mike

It was identifying the reflection of radio signals from a flying
aircraft that led to the development and use of radar.
Radar was major factor in the successful defence of Britain (Britain
1940) against German bombing (The Blitz) early in WWII (1939-1945).
Although it was initially very crude, (It was called Radio-location or
RDF, Radio Direction Finding) at the time.
Unfortunately the first war time US use of radar was misinterpreted
when the Japanese attacked Pearl Harbour in Dec 1941!

795. QEX DwnLoad - Dual 200 MHz RF Generator Article

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-14 20:44:58 UTC
From: "Thomas M. Alldread" <tmall@telus.net>
Message-ID: <b3oa351b3u4vim648d9iov16ndj2u62095@4ax.com>
Source record: 2748

Greetings:

The ARRL, publisher of QEX Magazine, has granted me permission to post the Acrobat Reader (pdf) files for the recently published NimbleSig III DDS RF Generator article series. Anyone who so wishes may download the article by taking the "QEX Article Downloads" link at the top of the table of contents on my web page at the following URL:

http://www3.telus.net/ta/NimbleSig%20III/

--
Best Wishes,
Tom Alldread, VA7TA
tmall@telus.net

796. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-14 23:39:07 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <QbudnQJiupeCF6jXnZ2dnUVZ_jCdnZ2d@giganews.com>
Source record: 2749
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

"Leon" <leon355@btinternet.com> wrote in message
news:a3dcb9c9-811e-486a-8c74-d0791c8c4e0f@y10g2000prc.googlegroups.com...
> On 13 June, 20:36, "Leland C. Scott" <kc8...@arrl.net> wrote:
>> "Harold E. Johnson" <W4...@mchsi.com> wrote in
>> messagenews:INSYl.740928$yE1.253509@attbi_s21...
>>
>>
>>
>> > "Leland C. Scott" <kc8...@arrl.net> wrote in message
>> >news:JLWdnYFglb9gdK7XnZ2dnUVZ_sSdnZ2d@giganews.com...
>> >> Does anybody have or know where to get a utility to convert from
>> >> ExpressPCB file format to a standard Gerber file? If not any info on
>> >> the
>> >> file format itself?
>>
>> > Yup. You can pay Express PCB for the file. (No utility) $75 the last
>> > time
>> > I bought one.
>>
>> That's not going to happen. I know I can get some reverse engineering
>> software that will import the layout as a graphic then trace over it
>> using
>> the PCB layout software to generate standard Gerber files. I'm looking
>> for
>> something easy and I'm not paying them $75 a pop for each small board to
>> convert.
>>
>> I also found out there maybe some utilities out, still looking, there
>> that
>> can convert from an exported PDF, or EPS file, to a Gerber format too.
>> Getting a PDF printer driver is easy. Use the driver when printing out a
>> copy of the board layout.
>>
>> --
>> Regards;
>>
>> Leland C. Scott
>> KC8LDO
>>
>> "Brilliance is typically the act of an
>> individual, but incredible stupidity
>> can usually be traced to an
>> organization."

>>
>> Jon Bentley
>
> Use Advanced Circuits. Their PCB Artist software is much better than
> Express PCB's (it's actually a special version of Easy-PC) and you get
> the Gerbers free with a second order for the same board, IIRC.
>
> Leon

Thanks for the advise.

--
Regards;

Leland C. Scott
KC8LDO

"The most reliable components are
the ones you leave out."

By Gordon Bell, father of the
minicomputer at DEC.

797. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-14 23:41:50 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <u-6dnYjDg-lZF6jXnZ2dnUVZ_r6dnZ2d@giganews.com>
Source record: 2750
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

```
"Tim Wescott" <tim@seemywebsite.com> wrote in message
news:h-KdncQ1TbGa_qnXnZ2dnUVZ_ohi4p2d@web-ster.com...
> On Sat, 13 Jun 2009 15:36:40 -0400, Leland C. Scott wrote:
>
>> "Harold E. Johnson" <W4ZCB@mchsi.com> wrote in message
>> news:INSYl.740928$yE1.253509@attbi_s21...
>>>
>>> "Leland C. Scott" <kc8ldo@arrl.net> wrote in message
>>> news:JLWdnYFglb9gdK7XnZ2dnUVZ_sSdnZ2d@giganews.com...
>>>> Does anybody have or know where to get a utility to convert from
>>>> ExpressPCB file format to a standard Gerber file? If not any info on
>>>> the file format itself?
>>>>
>>> Yup. You can pay Express PCB for the file. (No utility) $75 the last
>>> time I bought one.
>>
>> That's not going to happen. I know I can get some reverse engineering
>> software that will import the layout as a graphic then trace over it
>> using the PCB layout software to generate standard Gerber files. I'm
>> looking for something easy and I'm not paying them $75 a pop for each
>> small board to convert.
>>
>> I also found out there maybe some utilities out, still looking, there
>> that can convert from an exported PDF, or EPS file, to a Gerber format
>> too. Getting a PDF printer driver is easy. Use the driver when printing
>> out a copy of the board layout.
>
> Reverse the "Express" and the "PCB" and you'll find a really nice little
> company that will take Gerber files and make boards for you. Eagle PCB
> is free for small two-layer boards, includes schematic capture, and works
> well once you get your brain wrapped around their way of doing things.
>
> http://www.pcbexpress.com/
>
> --
> http://www.wescottdesign.com

I'm going to check them out. I do some small one-off PCB's to test some
ideas out. I would like to have the Gerber files when I'm done in case I
want to incorporate it in a larger design.

--
Regards;
```

Leland C. Scott
KC8LDO

"The most reliable components are
the ones you leave out."

By Gordon Bell, father of the
minicomputer at DEC.

798. Re: Does anyone know anything about Voice above or over ip provider?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-15 04:48:37 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <75e02260-808d-47b1-bf12-0500fbdeb724@d2g2000pra.googlegroups.com>
Source record: 2651

On Jun 12, 3:45 pm, You <y...@shadow.orgs> wrote:
>
>
> there are plenty of Computer Apps that can demod VoIP streams,
> and None of those are VoIP Boxes......

Hey OM:

Plenty? Name 5 of those so called computer apps.

73 OM

de n8zu

799. Re: Does anyone know anything about Voice above or over ip provider?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-15 05:15:01 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <ve1hg6-iu1.ln1@mail.specsol.com>
Source record: 2652

raypsi <RBorowiak@gmail.com> wrote:
> On Jun 12, 3:45 pm, You <y...@shadow.orgs> wrote:
>>
>>
>> there are plenty of Computer Apps that can demod VoIP streams,
>> and None of those are VoIP Boxes......
>
> Hey OM:
>
> Plenty? Name 5 of those so called computer apps.
>
> 73 OM
>
> de n8zu

Go to freshmeat.net and type VOIP in the search box.

--
Jim Pennino

Remove .spam.sux to reply.

800. Re: Does anyone know anything about Voice above or over ip provider?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-15 12:18:01 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <a4d47f63-e8dc-412e-bcc9-2d7397438465@w35g2000prg.googlegroups.com>
Source record: 2653

On Jun 15, 1:15 am, j...@specsol.spam.sux.com wrote:
> raypsi <RBorow...@gmail.com> wrote:
> > On Jun 12, 3:45 pm, You <y...@shadow.orgs> wrote:
>
> >> there are plenty of Computer Apps that can demod VoIP streams,
> >> and None of those are VoIP Boxes......
>
> > Hey OM:
>
> > Plenty? Name 5 of those so called computer apps.
>
> > 73 OM
>
> > de n8zu
>
> Go to freshmeat.net and type VOIP in the search box.
>

Hey OM:

That's rich, a hacker putting a SIP program that can access a VIOP stream then somehow miraculously transduce the SIP VIOP into acoustic energy out the back of his computer.

All those programs you need a sound card and speakers or headphones. But hey maybe the hacker is using the modulating the case fans to make audio out the back of his computer.? He didn't say the voices were coming out his speakers.

How else is audio voices coming out the back of his computer? And through out his house? He sure doesn't have SIP VIOP software in his CD player?

Just tell me how to get SIP VIOP software into my cd player?

73 OM

de n8zu

801. Re: Does anyone know anything about Voice above or over ip provider?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-15 18:09:22 UTC
From: JB <nospam@goofball.net>
Message-ID: <m7wZl.1166$P5.755@nwrddc02.gnilink.net>
Source record: 2654

```
"raypsi" <RBorowiak@gmail.com> wrote in message
news:a4d47f63-e8dc-412e-bcc9-2d7397438465@w35g2000prg.googlegroups.com...
> On Jun 15, 1:15 am, j...@specsol.spam.sux.com wrote:
> > raypsi <RBorow...@gmail.com> wrote:
> > > On Jun 12, 3:45 pm, You <y...@shadow.orgs> wrote:
> > >
> > >> there are plenty of Computer Apps that can demod VoIP streams,
> > >> and None of those are VoIP Boxes......
> > >
> > > Hey OM:
> > >
> > > Plenty? Name 5 of those so called computer apps.
> > >
> > > 73 OM
> > >
> > > de n8zu
> > >
> > Go to freshmeat.net and type VOIP in the search box.
> > >
>
> Hey OM:
>
> That's rich, a hacker putting a SIP program that can access a VIOP
> stream then somehow miraculously transduce the SIP VIOP into acoustic
> energy out the back of his computer.
>
> All those programs you need a sound card and speakers or headphones.
> But hey maybe the hacker is using the modulating the case fans to make
> audio out the back of his computer.? He didn't say the voices were
> coming out his speakers.
>
> How else is audio voices coming out the back of his computer? And
> through out his house? He sure doesn't have SIP VIOP software in his
> CD player?
>
> Just tell me how to get SIP VIOP software into my cd player?
>
> 73 OM
>
> de n8zu
>

It's not uncommon for AM radio or CB to be induced into wiring and
demodulated simply by rectification. The result may be strong enough to
```

activate computer or stereo speakers or the little transducer on dial-up modem cards or even metal flashing in the house.

802. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-15 22:18:22 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1d7c600d-08b1-46dd-baeb-c2acc11634f2@g15g2000pra.googlegroups.com>
Source record: 2655
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

On Jun 13, 12:36 pm, "Leland C. Scott" <kc8...@arrl.net> wrote:
> "Harold E. Johnson" <W4...@mchsi.com> wrote in
messagenews:INSYl.740928$yE1.253509@attbi_s21...
>
>
>
> > "Leland C. Scott" <kc8...@arrl.net> wrote in message
> >news:JLWdnYFglb9gdK7XnZ2dnUVZ_sSdnZ2d@giganews.com...
> >> Does anybody have or know where to get a utility to convert from
> >> ExpressPCB file format to a standard Gerber file? If not any info on the
> >> file format itself?
>
> > Yup. You can pay Express PCB for the file. (No utility) $75 the last time
> > I bought one.
>
> That's not going to happen. I know I can get some reverse engineering
> software that will import the layout as a graphic then trace over it using
> the PCB layout software to generate standard Gerber files. I'm looking for
> something easy and I'm not paying them $75 a pop for each small board to
> convert.
>
> I also found out there maybe some utilities out, still looking, there that
> can convert from an exported PDF, or EPS file, to a Gerber format too.
> Getting a PDF printer driver is easy. Use the driver when printing out a
> copy of the board layout.
>
> --
> Regards;
>
> Leland C. Scott
> KC8LDO
>
> "Brilliance is typically the act of an
> individual, but incredible stupidity
> can usually be traced to an
> organization."
>
> Jon Bentley

FWIW, I've been using FreePCB for layouts the past year or so, and
find it's pretty well documented and easy to use. It produces
Gerbers, and of course you already know that once you have those, you
can find lots of different places to order boards, some faster than

others, some cheaper than others. I do end up having to build footprints for FreePCB fairly often, but even that's not too bad, and once built, I have them for the future.

Cheers,
Tom

803. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-16 01:32:40 UTC
From: tom <news4792@taring.org>
Message-ID: <4a36f638$0$18864$8046368a@newsreader.iphouse.net>
Source record: 2656
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

stan wrote:

> It was identifying the reflection of radio signals from a flying
> aircraft that led to the development and use of radar.
> Radar was major factor in the successful defence of Britain (Britain
> 1940) against German bombing (The Blitz) early in WWII (1939-1945).
> Although it was initially very crude, (It was called Radio-location or
> RDF, Radio Direction Finding) at the time.
> Unfortunately the first war time US use of radar was misinterpreted
> when the Japanese attacked Pearl Harbour in Dec 1941!

Actually it was blocking of a radio transmission by ships passing on a
river that led to the development of radar.

tom
K0TAR

804. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-16 04:06:40 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <V_idnbb_aublh6rXnZ2dnUVZ_umdnZ2d@giganews.com>
Source record: 2657
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

Great. Thanks for the input. One other thing. I have a buddy who was looking
for a free Gerber editor for making minor artwork changes. He had some
boards done outside and needs to make some changes to fix a few boo-boos
when he did the design. You know of any? He only has Windows. I run Windows
and Linux so either would work. I could make the changes for him.

--
Regards;

Leland C. Scott
KC8LDO

"The most reliable components are
the ones you leave out."

By Gordon Bell, father of the
minicomputer at DEC.

"K7ITM" <k7itm@msn.com> wrote in message
news:1d7c600d-08b1-46dd-baeb-c2acc11634f2@g15g2000pra.googlegroups.com...
On Jun 13, 12:36 pm, "Leland C. Scott" <kc8...@arrl.net> wrote:
> "Harold E. Johnson" <W4...@mchsi.com> wrote in
> messagenews:INSYl.740928$yE1.253509@attbi_s21...
>
>
>
> > "Leland C. Scott" <kc8...@arrl.net> wrote in message
> >news:JLWdnYFglb9gdK7XnZ2dnUVZ_sSdnZ2d@giganews.com...
> >> Does anybody have or know where to get a utility to convert from
> >> ExpressPCB file format to a standard Gerber file? If not any info on
> >> the
> >> file format itself?
>
> > Yup. You can pay Express PCB for the file. (No utility) $75 the last
> > time
> > I bought one.
>
> That's not going to happen. I know I can get some reverse engineering
> software that will import the layout as a graphic then trace over it using
> the PCB layout software to generate standard Gerber files. I'm looking for
> something easy and I'm not paying them $75 a pop for each small board to
> convert.
>
> I also found out there maybe some utilities out, still looking, there that
> can convert from an exported PDF, or EPS file, to a Gerber format too.

> Getting a PDF printer driver is easy. Use the driver when printing out a
> copy of the board layout.
>
> --
> Regards;
>
> Leland C. Scott
> KC8LDO
>
> "Brilliance is typically the act of an
> individual, but incredible stupidity
> can usually be traced to an
> organization."
>
> Jon Bentley

FWIW, I've been using FreePCB for layouts the past year or so, and find it's pretty well documented and easy to use. It produces Gerbers, and of course you already know that once you have those, you can find lots of different places to order boards, some faster than others, some cheaper than others. I do end up having to build footprints for FreePCB fairly often, but even that's not too bad, and once built, I have them for the future.

Cheers,
Tom

805. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-16 04:40:28 UTC
From: JeffM <jeffm_@email.com>
Message-ID: <9f6d3303-beb7-4aba-8c82-9caaaa662c36@x5g2000yqk.googlegroups.com>
Source record: 2658
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

>Tim Wescott
>>Reverse the "Express" and the "PCB" and you'll find a really nice
>>little company that will take Gerber files and make boards for you.
>>Eagle PCB is free for small two-layer boards, includes
>>schematic capture, and works well
>>once you get your brain wrapped around their way of doing things.
>>
Leland C. Scott wrote:
>I'm going to check them out. I do some small one-off PCB's
>to test some ideas out. I would like to have the Gerber files
>when I'm done in case I want to incorporate it in a larger design.

When someone gets hot to trot for the Cadsoft product,
I like to remind him that he may find the same situation:
His work product tied up in **their** proprietary format:

The Downside of EAGLE aka ''The EAGLE virus'' by Markus Zingg
http://groups.google.com/group/comp.arch.embedded/browse_frm/thread/f794e82d26b59e18/d7cf4149edb93ac7?q=*-*-website+reuse+paying.*+*-I-will-switch+cracked-*+*.would.not.help.*+zzz+after-*-*-version-*+copied+*.*.unlock.*.designs+*-*-*-*-exchange-*-*-*-*-third-party+reused+qq+*-*-single-bit-*-*-*-*+useless+*-*-*-projects-could-no-longer-be-opened

806. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-16 13:42:30 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnh3f8a6.10mt.bit-bucket@shell.config.com>
Source record: 2659
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

```
On Mon, 15 Jun 2009 20:32:40 -0500, tom wrote:
> stan wrote:
>
>> It was identifying the reflection of radio signals from a flying
>> aircraft that led to the development and use of radar.
>> Radar was major factor in the successful defence of Britain (Britain
>> 1940) against German bombing (The Blitz) early in WWII (1939-1945).
>> Although it was initially very crude, (It was called Radio-location or
>> RDF, Radio Direction Finding) at the time.
>> Unfortunately the first war time US use of radar was misinterpreted
>> when the Japanese attacked Pearl Harbour in Dec 1941!
>
> Actually it was blocking of a radio transmission by ships passing on a
> river that led to the development of radar.

The Potomac -- I think that's what I read about it.

Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
38.24N 104.55W | @ config.com | Jonesy | OS/2
* Killfiling google & XXXXbanter.com: jonz.net/ng.htm
```

807. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-16 17:04:47 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <4cb8be89-5209-4c67-be77-65015d644d63@w40g2000yqd.googlegroups.com>
Source record: 2660
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

On Jun 15, 9:06 pm, "Leland C. Scott" <kc8...@arrl.net> wrote:
> Great. Thanks for the input. One other thing. I have a buddy who was looking
> for a free Gerber editor for making minor artwork changes. He had some
> boards done outside and needs to make some changes to fix a few boo-boos
> when he did the design. You know of any? He only has Windows. I run Windows
> and Linux so either would work. I could make the changes for him.

...
Well, I'm using ViewMate from PentaLogix. I don't do anything very
complex with it, basically just view my FreePCB outputs to make sure
everything is OK. I also use it to print the Gerbers for assembly
documentation and to make my own boards at home--I like the immediacy
of being able to make a board in an hour or two. ViewMate's free...
BUT it won't let you save changes. You have to spring for the upgrade
to ViewMaster EZ for $50 to be able to save (and do some other
things). There may be free solutions, but since ViewMate does what I
need, I haven't gone looking for them.

For fixing boo-boos, I'd a lot rather go back to the PC design program
and make the changes there, rather than hand-editing Gerbers, but I
suppose there are good reasons to modify the Gerbers directly. I do
recall some hassles trying to get my layout program do what I wanted
with a solder mask recently, and was really tempted to try to modify
the Gerbers!

Cheers,
Tom

808. Re: "Panel" style UHF DTV antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-16 17:15:44 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <h2jf355h4guhvit8po0ngq5jfhbcn2s5ss@4ax.com>
Source record: 2661
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.tv.tech.hdtv

On Mon, 15 Jun 2009 20:32:40 -0500, tom <news4792@taring.org> wrote:

>stan wrote:
>
>> It was identifying the reflection of radio signals from a flying
>> aircraft that led to the development and use of radar.
>> Radar was major factor in the successful defence of Britain (Britain
>> 1940) against German bombing (The Blitz) early in WWII (1939-1945).
>> Although it was initially very crude, (It was called Radio-location or
>> RDF, Radio Direction Finding) at the time.
>> Unfortunately the first war time US use of radar was misinterpreted
>> when the Japanese attacked Pearl Harbour in Dec 1941!
>
>Actually it was blocking of a radio transmission by ships passing on a
>river that led to the development of radar.
>
>tom
>K0TAR

RF blocking was used by both sides as a "burglar alarm" to detect
naval vessels passing through narrow straights. Germany tried to get
such a system working across the Straits of Gibraltar, but were foiled
by Spain's failure to cooperate.

Radar was officially "invented" in 1935 when Watson-Watt was asked by
the air ministry to calculate the possibility of using RF as a "death
ray" to cook an airplane pilot in flight. Some calculations were
performed which quickly determined that it was impossible. However,
he suggested that a similar system could be used to detect the
airplane by combining the range finding of ionospheric layers
techniques and the direction finding techniques used to detect
thunderstorms. At the time, there were also proposals for aircraft
detection using infrared and sound detection. Not wanting to lose
their funding, it was agreed that RF reflection was a good idea and
that research should continue on this different path.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

809. Re: Does anyone know anything about Voice above or over ip provider?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-16 19:58:43 UTC
From: stan <tsanford@nf.sympatico.ca>
Message-ID: <ec788305-bc77-4a43-9669-dcb56ac092ef@x6g2000vbg.googlegroups.com>
Source record: 2662

On Jun 6, 2:45 pm, dpl...@radagast.org (Dave Platt) wrote:
> > I have been getting sounds in our house that seems to come from
> > electronic stuff around the house.
> > I also listened to what sounded like voices coming from behind the
> > computer?
>
> Voices coming out of loudspeakers or other electronic equipment which
> contains them, can occur as the result of strong radio frequency
> signals. A strong enough RF signal, modulated by someone's voice, can
> be picked up by the household wiring (mains cables, telephone wire,
> speaker cables, etc.) and leak into the electronic equipment. Once
> inside the equipment, it can be accidentally "detected" (converted
> from radio frequencies back to audio) by semiconductors in the
> circuitry, amplified, and played out through the equipment's speakers.
>
> Telephones, answering machines, baby monitors, powered subwoofers,
> computer speaker systems, etc. can all be prone to this. I suppose
> that an internal modem card in a PC - one with a loudspeaker - could
> pick up enough RF via its phone-line connection to start detecting
> audio in this way.
>
> The strong RF signal might come from any of a number of sources... all
> probably fairly close to the house. Commercial AM transmitters can
> cause this, as can ham-radio transmitters, and CB radios. Here in the
> U.S., *legal* CB transmissions usually aren't strong enough to cause
> problems, but some CB operators use illegal high-power amplifiers that
> can boost the signal far enough to cause this sort of inadvertent
> pickup.
>
> I don't know what the law is about this sort of problem in Canada.
> Here in the U.S., the FCC generally considers it to be a defect in the
> equipment which is picking up the RF - if a device isn't *supposed* to
> be a radio, it shouldn't *behave" like a radio, is their thinking.
> It's referred to as "undesired operation", and the "Part 15" notice
> which comes with most consumer electronic devices says that the device
> "must accept radio frequency interference, including that which causes
> undesired operation."
>
> There are several ways to address the problem:
>
> - Replace the RF-sensitive devices with better-designed devices that
>   don't have the problem.
>
> - Add RF filters or chokes to the phone lines, speaker cables, power

> lines, etc. to block the RF before it enters the equipment.
>
> - Find the person or company whose transmitters are generating the RF,
> and ask them to stop (they'll probably refuse, as they often have
> a perfectly good legal license to transmit).
>
> - Live with it.
>
> - Move.
>
> If you can find which pieces of equipment are picking up the RF (and,
> in doing so, confirm that this is the problem) you can likely correct
> the problem with some clamp-on ferrite chokes, and/or a telephone-line
> RF filter (a DSL mini-filter may well do the job).
>
> Seehttp://www.palomar-engineers.com/RFI_Kit/rfi_kit.htmlfor a kit of
> ferrite components specifically intended for this sort of household
> problem.
>
> I'm not sure what connection there might be between the voices/noises
> you are hearing, and any "voice over IP provider". Your message isn't
> clear whether you actually have telephone service over IP, or whether
> you think someone else's voice-over-IP service is affecting you
> accidentally (very unlikely, in my opinion).
>
> --
> Dave Platt <dpl...@radagast.org> AE6EO
> Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

Agree with all of that. Even 'back when' stories abounded about people picking up radio transmissions on all kinds of unlikely devices; one was about a lady who 'received' faint radio signals radio on her electric heater. The outcome was that a corroded connection was acting as a detector (like in an old time crystal radio set) the coiled heating element was an inductor and the metal case of the heater was a sound box! When it was investigated she said she "Didn't mind a bit and in fact thought it was quite entertaining"!
Today there are so many solid state devices around any home that one wouldn't be surprised if one could 'hear' things from a ceiling fan, dimmer switch, or certainly something with audio amplification such as computer speakers!

810. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-16 22:57:52 UTC
From: Leon <leon355@btinternet.com>
Message-ID: <5fd970fa-feb9-41b1-b078-e9960f0de82e@k8g2000yqn.googlegroups.com>
Source record: 2663
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

On 16 June, 05:06, "Leland C. Scott" <kc8...@arrl.net> wrote:
> Great. Thanks for the input. One other thing. I have a buddy who was looking
> for a free Gerber editor for making minor artwork changes. He had some
> boards done outside and needs to make some changes to fix a few boo-boos
> when he did the design. You know of any? He only has Windows. I run Windows
> and Linux so either would work. I could make the changes for him.

The Pulsonix software I use has can import Gerber files and edit them,
but it isn't free.

Leon

811. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-16 23:02:05 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <R8WdnahE4qDpuaXXnZ2dnUVZ_sydnZ2d@giganews.com>
Source record: 2664
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

Tom;

I understand your points. My buddy does not have access to the software that was used for the layout. That's why he wanted the Gerber editor.

What I have found so far is a free (GPL'd) Gerber file viewer, no editor.

http://gerbv.sourceforge.net/

There are both Windows and Linux versions available for down load. It has a few bugs but so far as a viewer it works remarkably well.

--
Regards;

Leland C. Scott
KC8LDO

"Brilliance is typically the act of an
individual, but incredible stupidity
can usually be traced to an
organization."

Jon Bentley

"K7ITM" <k7itm@msn.com> wrote in message
news:4cb8be89-5209-4c67-be77-65015d644d63@w40g2000yqd.googlegroups.com...
On Jun 15, 9:06 pm, "Leland C. Scott" <kc8...@arrl.net> wrote:
> Great. Thanks for the input. One other thing. I have a buddy who was
> looking
> for a free Gerber editor for making minor artwork changes. He had some
> boards done outside and needs to make some changes to fix a few boo-boos
> when he did the design. You know of any? He only has Windows. I run
> Windows
> and Linux so either would work. I could make the changes for him.

...
Well, I'm using ViewMate from PentaLogix. I don't do anything very
complex with it, basically just view my FreePCB outputs to make sure
everything is OK. I also use it to print the Gerbers for assembly
documentation and to make my own boards at home--I like the immediacy
of being able to make a board in an hour or two. ViewMate's free...
BUT it won't let you save changes. You have to spring for the upgrade
to ViewMaster EZ for $50 to be able to save (and do some other
things). There may be free solutions, but since ViewMate does what I
need, I haven't gone looking for them.

For fixing boo-boos, I'd a lot rather go back to the PC design program and make the changes there, rather than hand-editing Gerbers, but I suppose there are good reasons to modify the Gerbers directly. I do recall some hassles trying to get my layout program do what I wanted with a solder mask recently, and was really tempted to try to modify the Gerbers!

Cheers,
Tom

812. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-16 23:19:00 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <XY-dnTvrKOrxtaXXnZ2dnUVZ_t2dnZ2d@giganews.com>
Source record: 2665
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

"JeffM" <jeffm_@email.com> wrote in message
news:9f6d3303-beb7-4aba-8c82-9caaaa662c36@x5g2000yqk.googlegroups.com...
>When someone gets hot to trot for the Cadsoft product,
>I like to remind him that he may find the same situation:
>*His* work product tied up in **their** proprietary format:

Boo! Hiss! Kick the dog. Well the dog isn't to blame , maybe not a good idea
to kick it.

Check this out.

http://gerbv.sourceforge.net/

http://pcb.gpleda.org/news.html#20090202

http://www.gpleda.org/index.html

I haven't tried out most of these tools. It would be interesting to get
somebody's comments who has used them for a project.

--
Regards;

Leland C. Scott
KC8LDO

"Brilliance is typically the act of an
individual, but incredible stupidity
can usually be traced to an
organization."

Jon Bentley

813. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-16 23:43:28 UTC
From: hal-usenet@ip-64-139-1-69.sjc.megapath.net
Message-ID: <WMKdnZGBOo69s6XXnZ2dnUVZ_r5i4p2d@megapath.net>
Source record: 2666
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

>What I have found so far is a free (GPL'd) Gerber file viewer, no editor.

How much editing do you want to do?

Gerber files are just text. You can edit with a normal text editor.
As long as you have a good viewer you can see if your edits did what
you want.

--
These are my opinions, not necessarily my employer's. I hate spam.

814. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-17 01:03:35 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <9ZmdneaPuo1w3aXXnZ2dnUVZ_rednZ2d@giganews.com>
Source record: 2667
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

Hal;

May have to reroute a few traces that cross a significant length of the
board to fix some design errors. I haven't looked at the raw Gerber files to
see how easy doing the editing by hand word be to do.

--
Regards;

Leland C. Scott
KC8LDO

"The most reliable components are
the ones you leave out."

By Gordon Bell, father of the
minicomputer at DEC.

"Hal Murray" <hal-usenet@ip-64-139-1-69.sjc.megapath.net> wrote in message
news:WMKdnZGBOo69s6XXnZ2dnUVZ_r5i4p2d@megapath.net...
>
>>What I have found so far is a free (GPL'd) Gerber file viewer, no editor.
>
> How much editing do you want to do?
>
> Gerber files are just text. You can edit with a normal text editor.
> As long as you have a good viewer you can see if your edits did what
> you want.
>
> --
> These are my opinions, not necessarily my employer's. I hate spam.
>

815. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-17 01:10:52 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <kL6dneya5b4836XXnZ2dnUVZ_vSdnZ2d@giganews.com>
Source record: 2668
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

"Leon" <leon355@btinternet.com> wrote in message
news:5fd970fa-feb9-41b1-b078-e9960f0de82e@k8g2000yqn.googlegroups.com...
>
> The Pulsonix software I use has can import Gerber files and edit them,
> but it isn't free.

You have a rough idea as to the cost for the bare-bones PCB core? I didn't
see any prices on the web sites from a quick look..

--
Regards;

Leland C. Scott
KC8LDO

"The most reliable components are
the ones you leave out."

By Gordon Bell, father of the
minicomputer at DEC.

816. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-17 03:52:00 UTC
From: JosephKK <quiettechblue@yahoo.com>
Message-ID: <k0qg35lm3i3g9fsuvi0nbtq2di5cgst2go@4ax.com>
Source record: 2669
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

On Mon, 15 Jun 2009 21:40:28 -0700 (PDT), JeffM <jeffm_@email.com>
wrote:

>>Tim Wescott
>>>Reverse the "Express" and the "PCB" and you'll find a really nice
>>>little company that will take Gerber files and make boards for you.
>>>Eagle PCB is free for small two-layer boards, includes
>>>schematic capture, and works well
>>>once you get your brain wrapped around their way of doing things.
>>>
>Leland C. Scott wrote:
>>I'm going to check them out. I do some small one-off PCB's
>>to test some ideas out. I would like to have the Gerber files
>>when I'm done in case I want to incorporate it in a larger design.
>
>When someone gets hot to trot for the Cadsoft product,
>I like to remind him that he may find the same situation:
>*His* work product tied up in **their** proprietary format:
>
>The Downside of EAGLE aka ''The EAGLE virus'' by Markus Zingg
>http://groups.google.com/group/comp.arch.embedded/browse_frm/thread/f794e82d26b59e18/d7cf
4149edb93ac7?q=*-*-website+reuse+paying.*+*-I-will-switch+cracked-*+*.would.not.help.*+zzz
+after-*-*-version-*+copied+*.*.unlock.*.designs+*-*-*-*-exchange-*-*-*-*-third-party+reus
ed+qq+*-*-single-bit-*-*-*-*+useless+*-*-*-projects-could-no-longer-be-opened

Poxy hell mate. Have you never heard of tinyURL?

817. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-17 05:00:44 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <OtidnTxsbo3h5aXXnZ2dnUVZ_uidnZ2d@web-ster.com>
Source record: 2670
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

On Mon, 15 Jun 2009 21:40:28 -0700, JeffM wrote:

>>Tim Wescott
>>>Reverse the "Express" and the "PCB" and you'll find a really nice
>>>little company that will take Gerber files and make boards for you.
>>>Eagle PCB is free for small two-layer boards, includes schematic
>>>capture, and works well
>>>once you get your brain wrapped around their way of doing things.
>>>
> Leland C. Scott wrote:
>>I'm going to check them out. I do some small one-off PCB's to test some
>>ideas out. I would like to have the Gerber files when I'm done in case I
>>want to incorporate it in a larger design.
>
> When someone gets hot to trot for the Cadsoft product, I like to remind
> him that he may find the same situation: *His* work product tied up in
> **their** proprietary format:
>
> The Downside of EAGLE aka ''The EAGLE virus'' by Markus Zingg
> http://groups.google.com/group/comp.arch.embedded/browse_frm/thread/
f794e82d26b59e18/d7cf4149edb93ac7?q=*-*-website+reuse+paying.*+*-I-will-
switch+cracked-*+*.would.not.help.*+zzz+after-*-*-version-*+copied
+*.*.unlock.*.designs+*-*-*-*-exchange-*-*-*-*-third-party+reused+qq+*-*-
single-bit-*-*-*-*+useless+*-*-*-projects-could-no-longer-be-opened

Ah, I forgot about that issue.

So, any _other_ PCB layout program that coughs up a Gerber. Or be
careful of what you copy into your schematics.

--
www.wescottdesign.com

818. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-17 07:48:54 UTC
From: hal-usenet@ip-64-139-1-69.sjc.megapath.net
Message-ID: <QpqdnU3sNZt7AqXXnZ2dnUVZ_jti4p2d@megapath.net>
Source record: 2671
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

In article <9ZmdneaPuo1w3aXXnZ2dnUVZ_rednZ2d@giganews.com>,
"Leland C. Scott" <kc8ldo@arrl.net> writes:
>Hal;
>
>May have to reroute a few traces that cross a significant length of the
>board to fix some design errors. I haven't looked at the raw Gerber files to
>see how easy doing the editing by hand word be to do.

It's not the length that matters but the number of segments.

I didn't mean to suggest that it would be simple. It would take
a bit of trial and error to get going. You would probably have
to find some specs for the gerber file format.

I'd probably do the routing on paper and then transfer it to
the gerber file. The important point is that you can use the
viewer to show what you have so you know if you got it right.

--
These are my opinions, not necessarily my employer's. I hate spam.

819. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-17 13:22:22 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <DYudnfWY3PuOc6XXnZ2dnUVZ_tidnZ2d@giganews.com>
Source record: 2672
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

Hal;

I'll suggest that to my buddy and see if he has any luck. I didn't consider trying that method. The board he has is about 10 by 12 inches, double sided with around 40 through hole chips on it with several dozen discrete components sprinkled around them. That could get very interesting.

Thanks for the suggestion and this may be what he will have to do. The free Gerber viewer I found will come in handy for checking the results as you pointed out. I'm sure I can find the spec's for the Gerber file format on line some place so that shouldn't be a problem.

Thanks;

Leland C. Scott
KC8LDO

"The most reliable components are
the ones you leave out."

By Gordon Bell, father of the
minicomputer at DEC.

"Hal Murray" <hal-usenet@ip-64-139-1-69.sjc.megapath.net> wrote in message news:QpqdnU3sNZt7AqXXnZ2dnUVZ_jti4p2d@megapath.net...
> In article <9ZmdneaPuo1w3aXXnZ2dnUVZ_rednZ2d@giganews.com>,
> "Leland C. Scott" <kc8ldo@arrl.net> writes:
>>Hal;
>>
>>May have to reroute a few traces that cross a significant length of the
>>board to fix some design errors. I haven't looked at the raw Gerber files
>>to
>>see how easy doing the editing by hand word be to do.
>
> It's not the length that matters but the number of segments.
>
> I didn't mean to suggest that it would be simple. It would take
> a bit of trial and error to get going. You would probably have
> to find some specs for the gerber file format.
>
> I'd probably do the routing on paper and then transfer it to
> the gerber file. The important point is that you can use the
> viewer to show what you have so you know if you got it right.
>
> --

> These are my opinions, not necessarily my employer's. I hate spam.
>

820. So I have all this old radio equipment...

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-17 15:09:52 UTC
From: Jake <mechanicaljake@gmail.com>
Message-ID: <d35bedeb-809c-4156-945c-e02e80aa2061@h2g2000yqg.googlegroups.com>
Source record: 2673

Hey all,

Many years ago (Late 80's) I was given a variety of radio equipment from a gentleman I knew. He was going to new guinea as a missionary and gave me a bunch of parts/projects/stuff.

I have identified one of the (transcievers?) as an ARC-5. Also there is at least 2 more of these in parts, maybe more. Also a bunch of variable capacitors (the air-core metal finned ones) and various tubes and coils and other random stuff.

This stuff has been sitting in my attic for 20 years, slowly collecting dust and corrosion. A long time ago, I was going to get my general class license. I never took the test, and just don't have much hobby time anymore.

Does anyone know if this equipment is worth identifying and posting somewhere for sale/trade? And if so, where would I find people interested in this stuff?

Thanks in advance :-D

821. Re: So I have all this old radio equipment...

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-17 15:51:13 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <tYWdnRcrLrxsjaTXnZ2dnUVZ_gxi4p2d@bright.net>
Source record: 2674

Jake wrote:
> Hey all,
>
> Many years ago (Late 80's) I was given a variety of radio equipment
> from a gentleman I knew. He was going to new guinea as a missionary
> and gave me a bunch of parts/projects/stuff.
>
> I have identified one of the (transcievers?) as an ARC-5. Also there
> is at least 2 more of these in parts, maybe more. Also a bunch of
> variable capacitors (the air-core metal finned ones) and various tubes
> and coils and other random stuff.
>
> This stuff has been sitting in my attic for 20 years, slowly
> collecting dust and corrosion. A long time ago, I was going to get my
> general class license. I never took the test, and just don't have much
> hobby time anymore.
>
> Does anyone know if this equipment is worth identifying and posting
> somewhere for sale/trade? And if so, where would I find people
> interested in this stuff?
>
> Thanks in advance :-D

rec.radio.amateur.boatanchors newsgroup. The ARC-5 is a WWII era
aircraft radio as I recall.

822. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-17 16:46:45 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <169_l.215435$Tp1.101458@en-nntp-01.dc1.easynews.com>
Source record: 2675
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

"Leon" <leon355@btinternet.com> wrote in message
news:5fd970fa-feb9-41b1-b078-e9960f0de82e@k8g2000yqn.googlegroups.com...
> The Pulsonix software I use has can import Gerber files and edit them,
> but it isn't free.

It doesn't have many features that a purpose-built "Gerber editor" does,
although it certainly works in a pinch. (The biggest problem seems to be that
Pulsonix tries to be smart and figure out what things "are," whereas sometimes
you just want a "dumb" editor that thinks of everything as a drawn line or a
flashed shape.)

Protel used to have very good Gerber import abilities... I wonder if it still
does?

823. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-17 16:50:53 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <R99_l.195229$6p1.50984@en-nntp-02.dc1.easynews.com>
Source record: 2676
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

"Leland C. Scott" <kc8ldo@arrl.net> wrote in message
news:kL6dneya5b4836XXnZ2dnUVZ_vSdnZ2d@giganews.com...
> You have a rough idea as to the cost for the bare-bones PCB core? I didn't
> see any prices on the web sites from a quick look..

That almost always implies at least four digits. :-)

You pretty much have to call up your local Pulsonix distributor to get pricing -- it tends to vary significantly worldwide. As of a little more than a year ago, any Pulsonix suite that included PCB layout was >$2k in the U.S. A full-featured suite with a handful of the "spendy" options (network licensing, database connectivity, chip packaging toolkit, etc.) would tend to top $10k in the U.S.

824. Re: So I have all this old radio equipment...

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-17 17:46:35 UTC
From: JB <nospam@goofball.net>
Message-ID: <%Z9_l.3003$u86.2960@nwrddc01.gnilink.net>
Source record: 2677

"Scott" <acepilotREMOVE@bloomer.net> wrote in message
news:tYWdnRcrLrxsjaTXnZ2dnUVZ_gxi4p2d@bright.net...
> Jake wrote:
> > Hey all,
> >
> > Many years ago (Late 80's) I was given a variety of radio equipment
> > from a gentleman I knew. He was going to new guinea as a missionary
> > and gave me a bunch of parts/projects/stuff.
> >
> > I have identified one of the (transcievers?) as an ARC-5. Also there
> > is at least 2 more of these in parts, maybe more. Also a bunch of
> > variable capacitors (the air-core metal finned ones) and various tubes
> > and coils and other random stuff.
> >
> > This stuff has been sitting in my attic for 20 years, slowly
> > collecting dust and corrosion. A long time ago, I was going to get my
> > general class license. I never took the test, and just don't have much
> > hobby time anymore.
> >
> > Does anyone know if this equipment is worth identifying and posting
> > somewhere for sale/trade? And if so, where would I find people
> > interested in this stuff?
> >
> > Thanks in advance :-D
>
> rec.radio.amateur.boatanchors newsgroup. The ARC-5 is a WWII era
> aircraft radio as I recall.
>
The usual practice of widows and estate liquidators is to donate items left over from auctions to a local club to sort out. Most will be taken to swap meets where most items of interest will fall into the right hands. As an alternative, post group photos of items on a web site and post the links here and in boatanchors newsgroups and allow interested parties to ask about items via e-mail address set aside for that purpose.

Lots of stuff is only museum interesting, but some that you described, continues to be useful for antenna matching and other projects. Radio is still RF and laws of Physics are still valid and some parts would always be useful.if in good shape. Corrosion is only appealing on art objects and yard ornaments.

825. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-17 18:55:40 UTC
From: Baron <baron.nospam@linuxmaniac.nospam.net>
Message-ID: <h1be7e$43v$1@news.eternal-september.org>
Source record: 2678
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

Leland C. Scott wrote:

>
> "JeffM" <jeffm_@email.com> wrote in message
>
news:9f6d3303-beb7-4aba-8c82-9caaaa662c36@x5g2000yqk.googlegroups.com...
>>When someone gets hot to trot for the Cadsoft product,
>>I like to remind him that he may find the same situation:
>>*His* work product tied up in **their** proprietary format:
>
> Boo! Hiss! Kick the dog. Well the dog isn't to blame , maybe not a
> good idea to kick it.
>
> Check this out.
>
> http://gerbv.sourceforge.net/

I've used gerbv quite usefully ! It does take a little getting used to.

> http://pcb.gpleda.org/news.html#20090202
>
> http://www.gpleda.org/index.html
>
> I haven't tried out most of these tools. It would be interesting to
> get somebody's comments who has used them for a project.
>
>

--
Best Regards:
Baron.

826. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-18 06:53:38 UTC
From: Brad Velander <bveland@SpamThis.com>
Message-ID: <Svl_l.46$QS.5@newsfe18.iad>
Source record: 2679
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

Joel,
I would counter your comment below. True that Protel can import Gerber
but it is specifically a very limited Gerber import that works mainly only
with it's own exported Gerbers. Try importing Gerbers created in another
toool and you are fighting a difficult if not loosing battle. There are all
sorts of legitimate Gerber expressions that it will just gag on.

--
Sincerely,
Brad Velander.

"Joel Koltner" <zapwireDASHgroups@yahoo.com> wrote in message
news:169_l.215435$Tp1.101458@en-nntp-01.dc1.easynews.com...
> "Leon" <leon355@btinternet.com> wrote in message
> news:5fd970fa-feb9-41b1-b078-e9960f0de82e@k8g2000yqn.googlegroups.com...
>
> Protel used to have very good Gerber import abilities... I wonder if it
> still does?

827. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-18 19:24:45 UTC
From: Leon <leon355@btinternet.com>
Message-ID: <f15e1982-656f-4bde-96a6-0ae381ecdb6c@l8g2000vbp.googlegroups.com>
Source record: 2680
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

On 17 June, 02:10, "Leland C. Scott" <kc8...@arrl.net> wrote:
> "Leon" <leon...@btinternet.com> wrote in message
>
> news:5fd970fa-feb9-41b1-b078-e9960f0de82e@k8g2000yqn.googlegroups.com...
>
>
>
> > The Pulsonix software I use has can import Gerber files and edit them,
> > but it isn't free.
>
> You have a rough idea as to the cost for the bare-bones PCB core? I didn't
> see any prices on the web sites from a quick look..
>
> --
> Regards;
>
> Leland C. Scott
> KC8LDO
>
> "The most reliable components are
> the ones you leave out."
>
> By Gordon Bell, father of the
> minicomputer at DEC.

About $3,000.

Leon

828. Filter choke specs

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-18 21:01:58 UTC
From: Hank Zoeller <bogusaddress@dontbothernotvalid.com>
Message-ID: <001be9d5$0$5786$c3e8da3@news.astraweb.com>
Source record: 2681

Hello,

Can power supply filter chokes be used beyond their stated current ratings? Are they typically rated for continuous duty? If so, if used in ICAS service can I draw more current than rated?

For example, I have a choke rated for 5 Henries at 400 MA (25 Ohms). I'd like to use it in a circuit drawing up to 650 MA peak. This would be for a class C amp -- CW only.

Thanks for any input.

73,
-HZ

829. Re: Filter choke specs

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-18 22:03:21 UTC
From: Dave M <masondg4499@comcast.net>
Message-ID: <R_OdnTvr4oc3JKfXnZ2dnUVZ_gednZ2d@giganews.com>
Source record: 2682

"Hank Zoeller" <bogusaddress@dontbothernotvalid.com> wrote in message
news:001be9d5$0$5786$c3e8da3@news.astraweb.com...
> Hello,
>
> Can power supply filter chokes be used beyond their stated current
> ratings? Are they typically rated for continuous duty? If so, if used in
> ICAS service can I draw more current than rated?
>
> For example, I have a choke rated for 5 Henries at 400 MA (25 Ohms). I'd
> like to use it in a circuit drawing up to 650 MA peak. This would be for
> a class C amp -- CW only.
>
> Thanks for any input.
>
> 73,
> -HZ

You're proposing to run the choke at more than 150% of its current rating.
That will have at least two very adverse effects.
First, you could overheat the windings to the point of burning insulation on
the windings, burning the wire open, causing a fire, etc.
Second, you're running the very possible risk of saturating the core,
causing major loss of inductance. The effect this would have on your
circuit depends on its actual component values and how well the rest of the
circuit can forgive the loss of inductance.
My recommendation would be to get a choke of the appropriate ratings.

That said, you should download a copy of Duncan's power supply designer from
http://www.duncanamps.com/psud2/index.html and input your component values,
load it with a stepped constant current load and see how it performs. This
program will show you the current and voltage waveforms and values, but it
won't show the core saturation effects. You'll need more sophisticated
software for that (Spice).

Cheers
--
HAM AND EGGS -- A day's work for a chicken, a lifetime commitment for a pig.

Dave M

830. Re: Filter choke specs

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-19 02:08:33 UTC
From: Hank Zoeller <bogusaddress@dontbothernotvalid.com>
Message-ID: <0082313b$0$5925$c3e8da3@news.astraweb.com>
Source record: 2683

Dave M wrote:
> You're proposing to run the choke at more than 150% of its current rating.
> That will have at least two very adverse effects.
..edited for brevity..

Thanks for the reality check. It was wishful thinking on my part --
based on some hazy recollection of running transformers in ICAS service
beyond their CCS ratings.

> That said, you should download a copy of Duncan's power supply designer from
> http://www.duncanamps.com/psud2/index.html
..edited for brevity..

That's a great resource. Thank you for that link!

--
73,
HZ

831. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-19 21:59:59 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <CTT_l.41756$op1.33593@en-nntp-05.dc1.easynews.com>
Source record: 2684
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

Thanks for the information, Brad. When I was using Protel's Gerber import functionality, it was only with Gerber files Protel itself had generated, so I never saw the important limitations you're describing.

---Joel

832. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-20 07:44:04 UTC
From: Brad Velander <bveland@SpamThis.com>
Message-ID: <8r0%l.35839$QS.32568@newsfe18.iad>
Source record: 2685
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad

Joel,
Glad I could enlighten or warn.
Plenty of users only find it out after their expectations are raised.
The first one that I stumbled across was that it wouldn't even import some
Protel Generated files that had been re-exported from their own Camtastic
2000DE after a couple of very minor edits.
Some externally generated Gerbers may be formatted much closer than
others to the precise format required.for Protel import. I have heard of a
couple people having success with only edits to the initial Gerber
configuration statements (approx. the first dozen lines). That wasn't the
case in a couple of my attempted imports, the required edits grew
exponentially as I tried to progress.
--
Sincerely,
Brad Velander.

"Joel Koltner" <zapwireDASHgroups@yahoo.com> wrote in message
news:CTT_l.41756$op1.33593@en-nntp-05.dc1.easynews.com...
> Thanks for the information, Brad. When I was using Protel's Gerber import
> functionality, it was only with Gerber files Protel itself had generated,
> so I never saw the important limitations you're describing.
>
> ---Joel
>

833. Re: Filter choke specs

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-20 12:29:01 UTC
From: Stray Dog <qcwa150@sdf.lonestar.org>
Message-ID: <Pine.NEB.4.64.0906201200120.25130@sdf.lonestar.org>
Source record: 2686

My comments are below....

On Thu, 18 Jun 2009, Dave M wrote:

> Date: Thu, 18 Jun 2009 18:03:21 -0400
> From: Dave M <masondg4499@comcast.net>
> Newsgroups: rec.radio.amateur.homebrew
> Subject: Re: Filter choke specs
>
> "Hank Zoeller" <bogusaddress@dontbothernotvalid.com> wrote in message
> news:001be9d5$0$5786$c3e8da3@news.astraweb.com...
>> Hello,
>>
>> Can power supply filter chokes be used beyond their stated current
>> ratings? Are they typically rated for continuous duty? If so, if used in
>> ICAS service can I draw more current than rated?

Good questions.

See below.

>> For example, I have a choke rated for 5 Henries at 400 MA (25 Ohms). I'd
>> like to use it in a circuit drawing up to 650 MA peak. This would be for
>> a class C amp -- CW only.
>>
>> Thanks for any input.
>>
>> 73,
>> -HZ
>
>
> You're proposing to run the choke at more than 150% of its current rating.
> That will have at least two very adverse effects.
> First, you could overheat the windings to the point of burning insulation on
> the windings, burning the wire open, causing a fire, etc.

People need to think about the duty cycle of CW. The 400 ma rating of the choke _should_ be for CCS and that _should_ mean 100% duty cycle. Figure out yourself what the duty cycle of CW would be: a string of dots would be 50% duty cycle. A string of dashes would be 75% duty cycle. The other question would be, for CW, what is his key up resting current going to be compared to 650 ma (at peak)?

You have to think how much a choke heats up under its rated CCS current.

Hes got a choke with 25 ohms, so put a DC voltage accross that to get a current of 650 ma and feel the choke with your fingers every 4-5 minutes.

Or get a thermometer and touch the bulb to the case of the choke and watch it to see if the temperature comes up to a plateau (it should).

Quite frankly, I think its a _go_ project.

More below.

> Second, you're running the very possible risk of saturating the core,
> causing major loss of inductance.

That would depend entirely on whether the core had an anti-saturation air gap somewhere. As far as I know (and there was one curve in QST decades ago on this), all chokes have an inductance which has some relationship to current. When I was a kid I built a magnetic amplifier (and it worked) based on variable inductance in one winding controlled by variable current in another winding.

If this choke is going into a power supply and you are worried about whether such currents are going to hurt your voltage regulation, then you can hook up an oscilloscope (through an appropriate dropping voltage divider) and go ahead and key the current.

There are a lot of high power amplifiers that don't even use chokes in their power supplies, but put in extra capacitance.

Of course, if you are a purist-perfectionist, then go and plunk out the money for the bigger choke.

If it were me, I'd consider the criteria I mentioned above, do the DC current experiment (one at 400 ma and one at 650 ma) and see how hot the choke got. When chokes and transformers get a little overheated, they may smoke or give off fumes that you can smell, too. If you let the thing keep smoking, then after some time you will start to damage the insulation and wax impregnated paper layers.

A 25 ohm choke would need a little under 12 volts to get the 400 ma, and maybe somewhere around 16-19 volts to get up to around 2/3 of an amp. That will end up (without doing the actual arithmetic) being about ten watts of heat to dissipate. Don't forget that the actual duty cycle will be 50-75%, on CW, so your choke at 650 ma intermittent service is probably going to be dissipating heat as if it were close to the 400 ma CCS operating conditions.

I still think the project is a _go_.

The effect this would have on your
> circuit depends on its actual component values and how well the rest of the
> circuit can forgive the loss of inductance.
> My recommendation would be to get a choke of the appropriate ratings.
>
> That said, you should download a copy of Duncan's power supply designer from
> http://www.duncanamps.com/psud2/index.html and input your component values,
> load it with a stepped constant current load and see how it performs. This
> program will show you the current and voltage waveforms and values, but it

> won't show the core saturation effects. You'll need more sophisticated
> software for that (Spice).
>
> Cheers
> --
> HAM AND EGGS -- A day's work for a chicken, a lifetime commitment for a pig.
>
> Dave M
>
>
>

834. cb to 10m conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-20 22:00:17 UTC
From: Bob <kavacon@noga.com>
Message-ID: <MLGdnTCT9K1uxqDXnZ2dnUVZ_tidnZ2d@posted.visi>
Source record: 2687

Hi gang,
I'm looking for any information regarding converting pll type cbs to 10m.
Specifically I picked up a couple of Cobra HH33 handhelds and it looks like
a simple reference oscillator xtal change along with a new 2nd oscillator
using the orignal pll rock will get these things somewhere on 10.
Ideas? Web sites? Books?

Thanks!

Bob

835. Re: cb to 10m conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-20 22:57:54 UTC
From: Dave M <masondg4499@comcast.net>
Message-ID: <TeOdnRHM_vzv9KDXnZ2dnUVZ_vKdnZ2d@giganews.com>
Source record: 2688

"Bob" <kavacon@noga.com> wrote in message
news:MLGdnTCT9K1uxqDXnZ2dnUVZ_tidnZ2d@posted.visi...
> Hi gang,
> I'm looking for any information regarding converting pll type cbs to 10m.
> Specifically I picked up a couple of Cobra HH33 handhelds and it looks
> like a simple reference oscillator xtal change along with a new 2nd
> oscillator using the orignal pll rock will get these things somewhere on
> 10.
> Ideas? Web sites? Books?
>
> Thanks!
>
> Bob
>

Years ago (probably in the 70s), there was a flood of CB chassis on the surplus market from Hy-Gain, a major manufacturer that was going out of business. There was a number of magazine articles in 73 Magazine that went into excruciating detail on the CB-10M conversion. I never did one, but as I remember, it was a matter of changing crystals and some minor retuning. Don't remember if there were any component changes necessary, but if there were, they would likely be in the tuned RF circuits in the receiver front-end and in the transmitter final stage.
Take a look here (http://www.cbcintl.com/pllbook.htm) and you should get a pretty good idea on how to do your radio. If your Cobra is a recent model, the PLL might be completely different than the old PLL02 chips, but the theory should still be the same. There's also a doc on CB to 6M conversion at
http://6mt.com/index.php?option=com_docman&task=doc_download&gid=21&Itemid=53.
First thing I could recommend would be to see if you can find a schematic for your radio. That would allow you to do the math on the crystals and how they mix to make it work.

Cheers,
--
Dave M
masondg44 at comcast dot net

One good thing about Alzheimer's; you get to meet new people every day.

836. Re: cb to 10m conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-21 03:12:43 UTC
From: "Dr. Barry L. Ornitz" <BLOrnitz48@charter.net>
Message-ID: <Myh%I.40200$gz5.26914@newsfe07.iad>
Source record: 2689

"Dave M" <masondg4499@comcast.net> wrote in message
news:TeOdnRHM_vzv9KDXnZ2dnUVZ_vKdnZ2d@giganews.com...

> "Bob" <kavacon@noga.com> wrote in message
> news:MLGdnTCT9K1uxqDXnZ2dnUVZ_tidnZ2d@posted.visi...
>> Hi gang,
>> I'm looking for any information regarding converting pll type cbs to
>> 10m. Specifically I picked up a couple of Cobra HH33 handhelds and it
>> looks like a simple reference oscillator xtal change along with a new
>> 2nd oscillator using the orignal pll rock will get
?? these things somewhere on 10.
>> Ideas? Web sites? Books?

Changing the reference oscillator will change the channel spacing so
be careful here if you want the 10 meter channels to be 10 kHz apart.

> Years ago (probably in the 70s), there was a flood of CB chassis on the
> surplus market from Hy-Gain, a major manufacturer that was going out of
> business. There was a number of magazine articles in 73 Magazine that
> went into excruciating detail on the CB-10M conversion. I never did
> one, but as I remember, it was a matter of changing crystals and some
> minor retuning. Don't remember if there were any component changes
> necessary, but if there were, they would likely be in the tuned RF
> circuits in the receiver front-end and in the transmitter final stage.

I remember these. They were pretty trivial to convert to ham use.
Actually almost all of the CB radios of that time period used
identical circuit boards - except for the Tandy/Radio Shack models.
In radios with an automatic noise limiter or noise blanker, for
example, they just stuffed in a few more parts on the same printed
circuit board. I remember taking the covers off a $600 rack-mounted
radio (Dak) and showing the disappointed owner that inside it was
identical to a $39 radio!

One local club even built a 10 meter repeater. Since it is
relatively trivial to add FM to a transmitter, the repeater was FM-IN
and AM-OUT. Those Hy-Gain/Uniden/Cobra/Midland/etc. radios were
used with a varactor diode added to the transmit chain. The repeater
used separate sites for the receiver and the transmitter instead of a
duplexer. It worked quite well.

> Take a look here (http://www.cbcintl.com/pllbook.htm) and you should
> get a pretty good idea on how to do your radio. If your Cobra is a
> recent model, the PLL might be completely different than the old PLL02
> chips, but the theory should still be the same. There's also a doc on
> CB to 6M conversion at

> http://6mt.com/index.php?option=com_docman&task=doc_download&gid=21&Itemid=53.
> First thing I could recommend would be to see if you can find a
> schematic for your radio. That would allow you to do the math on the
> crystals and how they mix to make it work.

Dave gave some good advice here. I do not know if it is true of
modern CB radios, but in the late 1970's, manufacturers started using
bandpass crystal filters in the transmit chain instead of a set of 3
or 4 tuned circuits to clean up the mixing products. This filter had
a secondary purpose too - it prevented the radio from tuning very far
from the original CB channels.

73, Barry WA4VZQ BLOrnitz48@charter.net

837. Re: Filter choke specs

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-21 04:42:30 UTC
From: Lynn <coffelt2@comcast.net>
Message-ID: <L5SdnTd06ImkJ6DXnZ2dnUVZ_jOdnZ2d@giganews.com>
Source record: 2690

"Hank Zoeller" <bogusaddress@dontbothernotvalid.com> wrote in message
news:001be9d5$0$5786$c3e8da3@news.astraweb.com...
> Hello,
>
> Can power supply filter chokes be used beyond their stated current
> ratings? Are they typically rated for continuous duty? If so, if used in
> ICAS service can I draw more current than rated?
>
> For example, I have a choke rated for 5 Henries at 400 MA (25 Ohms). I'd
> like to use it in a circuit drawing up to 650 MA peak. This would be for
> a class C amp -- CW only.
>
> Thanks for any input.
>
> 73,

If the choke ratings are actually CCS (and not ICAS as many were/are), I
would go for it. If it doesn't quite work out, and the smoke bothers your
eyes, there is another easy solution. Since this is about homebrew, it is a
relatively simple project to rewind a choke (except, horror of horrors, a
potted choke). Use a little heavier wire. Since there probably won't be
enough
room for as many turns, you'll lose a little inductance, but who will know
the
difference? A little hum on a CW signal is quite distinguished anyway.

Old Chief Lynn, W7LTQ

838. FS - my Hendricks Scout

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-21 07:17:47 UTC
From: Bill M <radioexray@geemail.com>
Message-ID: <h1kmqu01v8d@news1.newsguy.com>
Source record: 2691

Great little receiver. Nothing that needs any apology. I've just become more focused on my HB Kitchin receiver and hate to see the Scout sitting here without a daily walk.

No problems with it. I sucked out the 'kit building' factor so I'll go less than the retail price. 35 USD sound ok? Plus shipping, call it $5 in the US.

Inquire to radioexray@gmail.com

-Bill, WX4A

839. Re: Filter choke specs

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-21 17:01:22 UTC
From: John KD5YI <groups2_dot_jocjo@xoxy.net>
Message-ID: <CHt%I.433$NF6.336@nwrddc02.gnilink.net>
Source record: 2692

"Hank Zoeller" <bogusaddress@dontbothernotvalid.com> wrote in message
news:001be9d5$0$5786$c3e8da3@news.astraweb.com...
> Hello,
>
> Can power supply filter chokes be used beyond their stated current
> ratings? Are they typically rated for continuous duty? If so, if used in
> ICAS service can I draw more current than rated?
>
> For example, I have a choke rated for 5 Henries at 400 MA (25 Ohms). I'd
> like to use it in a circuit drawing up to 650 MA peak. This would be for
> a class C amp -- CW only.
>
> Thanks for any input.
>
> 73,
> -HZ

I think most chokes today are rated for continuous duty. However, check with the manufacturer to be sure.

With respect to heating the choke, you can run higher current if you keep the rms value down to the choke's rating. To do this, you should have a duty factor as follows:

400 mA = 650 mA x sqrt(D) where D is the duty factor you must not exceed.

This gives (.4/.65)^2 or a duty factor of about 38%. (Can CW be sent at this duty?)

Expanding a bit on Dave M's comments:

Inductance at the higher current might be more problematic. As the iron gets closer to saturation, inductance takes a nose dive. This will cause higher peak currents which invalidate the above calculations because the higher peak currents mean higher RMS. This higher RMS current might also be bad for your filter capacitors. The only way to know for sure is to measure the true RMS choke and capacitor currents at the desired load current. You could then adjust your duty factor to not exceed the choke's rating. Then check the filter capacitor's RMS rating to see if it is exceeded. High RMS capacitor currents cause heating which dries out the electrolyte thus reducing the capacitor's life. Also check your ripple voltage to see if it is tolerable. Do all this without overheating the choke.

Good luck with your project.

John - KD5YI

840. Other uses for Microwave oven transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-21 23:21:03 UTC
From: terry <tsanford@nf.sympatico.ca>
Message-ID: <a3476bb2-7b69-44a9-8b92-63eb7ebf4f94@g20g2000vba.googlegroups.com>
Source record: 2693

Trying to clear out some 'junk' but have always tended to keep
scrapped parts from old (UNREPAIRABLE/NOT-WORTH-FIXING) microwaves!

e.g. the transformers, fans, fuse holders, overheat switches. And even
occasionally have used some of them for repairs to other microwaves!

I applied 115.7 volts AC to what had been the HV winding of one of
these scrapped transf. recently and got about 6 volts on what had been
the original primary. That established the ratio between the two
windings as approx 20:1.

Also a small voltage (about 0.185 volts) across what had been the
magnetron (Approx. 3 volt?) heater winding. Which gives ratio of about
1:33 to the original primary winding; also a ratio of about 1:700 from
the original HV winding.

So the idea of using the transformer backwards comes to mind????

Depending on the unit they are typically rated as follows?

Input winding 115 volts at whatever total wattage of the magnetron
circuit is. Assume say 1000 watts requiring about 8.7 amps primary
current! Usually intermittent use.

The original HV secondary operates at around 2200 volts, so 1000 watts
(ignore the magnetron heater current for a moment) would average about
400 to 500 milliamps? And pretty peaky because of the half wave high
voltage doubling circuit???

More moderately; at 115 volts and say 400 m/a into the old HV winding
the transformer might be able to supply around 6 volts at around 5 to
7 amps from what used to be the 115 volt primary?
Or at 115v/250 m/a maybe 3 to 5 amps? For 6.3v heaters?

Alternatively could such an ex-microwave power transformer be used in
the plate circuit (non-push/pull) of an audio amp using say a 6v6 or
6L6 (perhaps triode connected?) with a DC plate current of 45 to 75
milliamps?

Thus in such an arrangement the 20:1 ratio to the original primary
could provide something of a match for an 8 ohm speaker? (20)^2 x 8 =
3200

Problems; the laminations of such transformers do not seem to have air
spaces as in some audio transformers carrying DC? The bottom (neutral)
end of HV winding is sometimes at cabinet 'ground'. Hence a problem;
unless the transformer is isolated and even then the transformer frame
could be 'hot' whenever the unit is plugged in if that winding now

used as the primary! Therefore unsafe.

Have also heard of cutting off the old HV winding etc. and using the remainder of transformer to make battery charger; down rating a typical transformer to say 500 watts (continuous) for battery charging that's sort of around 30 to 40 amps at 12+ volts. Not sure what the turns per volt would be but should be possible to poke a few turns around the partially stripped core until one gets around 14 to 15 volts RMS.

This is all supposition at this stage! Any comments criticism????

841. Re: Other uses for Microwave oven transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-22 11:36:59 UTC
From: JC Morrice <John@pentode.demon.co.uk>
Message-ID: <QyRAELAbz2PKFwri@pentode.demon.co.uk>
Source record: 2694

In article <a3476bb2-7b69-44a9-8b92-63eb7ebf4f94@g20g2000vba.googlegroup
s.com>, terry <tsanford@nf.sympatico.ca> writes

>Trying to clear out some 'junk' but have always tended to keep
>scrapped parts from old (UNREPAIRABLE/NOT-WORTH-FIXING) microwaves!
>
>e.g. the transformers, fans, fuse holders, overheat switches. And even
>occasionally have used some of them for repairs to other microwaves!
>
>I applied 115.7 volts AC to what had been the HV winding of one of
>these scrapped transf. recently and got about 6 volts on what had been
>the original primary. That established the ratio between the two
>windings as approx 20:1.
>
>Also a small voltage (about 0.185 volts) across what had been the
>magnetron (Approx. 3 volt?) heater winding. Which gives ratio of about
>1:33 to the original primary winding; also a ratio of about 1:700 from
>the original HV winding.
>
>So the idea of using the transformer backwards comes to mind????
snip.......

>Depending on the unit they are typically rated as follows?
>This is all supposition at this stage! Any comments criticism????
Seems there are quite a few uses for them!

Other uses:

good:
http://www.rhunt.f9.co.uk/Electronics/Spot_Welder/Spot_Welder_Page1.htm

Neat, but not so good - has he never heard of screening mains supplies?:
http://www.youtube.com/watch?v=Wp7JF2sANsw

Sheesh - doing this over large metal sheets with live mains involved an
apparently zero mains insulation / isolation box / separation. Would
LOVE to see his kilowatt linear; but perhaps not:
http://www.instructables.com/id/Build-a-Microwave-Transformer-Homemade-
Welder/

John
--
JC Morrice
john@pentode.demon.co.uk

842. Re: Other uses for Microwave oven transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-22 14:40:26 UTC
From: Stray Dog <qcwa150@sdf.lonestar.org>
Message-ID: <Pine.NEB.4.64.0906221437010.10155@sdf.lonestar.org>
Source record: 2695

Your concepts are good, and if you do google searches on "microwave oven transformers" you will get websites that talk about their experiences.

I did buy a couple of used microwave ovens at local thrift stores for $5 each and played with the big transformers inside.

I was not satisfied with the result. One of the things some of the websites talk about is that you have to remove the "magnetic choke" that is part of the core. This needs a good hammer and a "punch" and was much harder to do for one transformer than another. And, after taking it out, it still did not perform.

The problem I found in both of my transformers is that at low voltages and a reasonable load, it was fine, but from about 50 volts and on up to line voltage into the primary, the primary current went up much faster than it should have considering the load that I put on the transformer secondary. I do not know what kind of load magnetrons put on power supply transformers but i suspect it is not like a continuous load. I tried to do google searches on magnetron current-voltage relationships but could not find anything. Certainly those "magnetic chokes" must be doing something.

In the end, I wound up buying my plate transformers at hamfests and also one, new, made by Hammond in Canada. Peter Dahl is out of business, and Ameritron (I think) will sell plate transformers and some are reasonably priced for the power and voltage. Fair Radio Sales (Lima, Ohio) and Radio-Daze (NY) are two that sell Hammond transformers, including large plate transformers (many types, specs all over the map, too).

//

On Sun, 21 Jun 2009, terry wrote:

> Date: Sun, 21 Jun 2009 16:21:03 -0700 (PDT)
> From: terry <tsanford@nf.sympatico.ca>
> Newsgroups: rec.radio.amateur.homebrew
> Subject: Other uses for Microwave oven transformers?
>
> Trying to clear out some 'junk' but have always tended to keep
> scrapped parts from old (UNREPAIRABLE/NOT-WORTH-FIXING) microwaves!
>
> e.g. the transformers, fans, fuse holders, overheat switches. And even
> occasionally have used some of them for repairs to other microwaves!
>
> I applied 115.7 volts AC to what had been the HV winding of one of
> these scrapped transf. recently and got about 6 volts on what had been
> the original primary. That established the ratio between the two

> windings as approx 20:1.
>
> Also a small voltage (about 0.185 volts) across what had been the
> magnetron (Approx. 3 volt?) heater winding. Which gives ratio of about
> 1:33 to the original primary winding; also a ratio of about 1:700 from
> the original HV winding.
>
> So the idea of using the transformer backwards comes to mind????
>
> Depending on the unit they are typically rated as follows?
>
> Input winding 115 volts at whatever total wattage of the magnetron
> circuit is. Assume say 1000 watts requiring about 8.7 amps primary
> current! Usually intermittent use.
>
> The original HV secondary operates at around 2200 volts, so 1000 watts
> (ignore the magnetron heater current for a moment) would average about
> 400 to 500 milliamps? And pretty peaky because of the half wave high
> voltage doubling circuit???
>
> More moderately; at 115 volts and say 400 m/a into the old HV winding
> the transformer might be able to supply around 6 volts at around 5 to
> 7 amps from what used to be the 115 volt primary?
> Or at 115v/250 m/a maybe 3 to 5 amps? For 6.3v heaters?
>
> Alternatively could such an ex-microwave power transformer be used in
> the plate circuit (non-push/pull) of an audio amp using say a 6v6 or
> 6L6 (perhaps triode connected?) with a DC plate current of 45 to 75
> milliamps?
>
> Thus in such an arrangement the 20:1 ratio to the original primary
> could provide something of a match for an 8 ohm speaker? (20)^2 x 8 =
> 3200
>
> Problems; the laminations of such transformers do not seem to have air
> spaces as in some audio transformers carrying DC? The bottom (neutral)
> end of HV winding is sometimes at cabinet 'ground'. Hence a problem;
> unless the transformer is isolated and even then the transformer frame
> could be 'hot' whenever the unit is plugged in if that winding now
> used as the primary! Therefore unsafe.
>
> Have also heard of cutting off the old HV winding etc. and using the
> remainder of transformer to make battery charger; down rating a
> typical transformer to say 500 watts (continuous) for battery charging
> that's sort of around 30 to 40 amps at 12+ volts. Not sure what the
> turns per volt would be but should be possible to poke a few turns
> around the partially stripped core until one gets around 14 to 15
> volts RMS.
>
> This is all supposition at this stage! Any comments criticism????

>

843. Re: Other uses for Microwave oven transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-22 15:55:05 UTC
From: mikea <mikea@mikea.ath.cx>
Message-ID: <p3m4h6-vub.ln1@mikea.ath.cx>
Source record: 2696

Stray Dog <qcwa150@sdf.lonestar.org> wrote in
<Pine.NEB.4.64.0906221437010.10155@sdf.lonestar.org>:

> In the end, I wound up buying my plate transformers at hamfests and also
> one, new, made by Hammond in Canada. Peter Dahl is out of business, and
> Ameritron (I think) will sell plate transformers and some are reasonably
> priced for the power and voltage. Fair Radio Sales (Lima, Ohio) and
> Radio-Daze (NY) are two that sell Hammond transformers, including large
> plate transformers (many types, specs all over the map, too).

Well, yes, Peter is out of the business, but the transformers and other
items are still being built to his specs:

<http://forums.qrz.com/showthread.php?t=153611?

<blockquote>
Peter Dahl Company has NOT been sold. It is NOT moving across the border
to Mexico. Gary no longer works for the them. The Peter Dahl Company has
stopped production, is closing their doors, and will become part of
Amateur Radio History!

But the NAME lives on!

Jeff Weinberg, W8CQ of Harbach Electronics, has purchased the rights to
the name, the original transformer and choke specifications and designs,
and the design equipment.

The transformers will be built by MagCap Engineering using the original
PWD specs, and sold through Harbach Electronics under the Peter Dahl
name. The transformer and chokes will be FOB Canton, MA and shipped
directly to the customer from MagCap.

This is great news for the Amateur Radio Community and a great way to
memorialize the Peter Dahl Company who's innovations and designs have
brought so much to our hobby.

To nullify any further rumors or innuendos about the status or future of
the Peter W Dahl Company, let me share the following e-mail with you
(edited for content)...

Quote:
Re: Harbach Electronics and Peter Dahl
From: "Jeff Weinberg W8CQ"
Date: Wed, February 20, 2008 2:30 pm
To: "Dino Darling"

Hi Dino,
Yes, the deal is finally completed. I have purchased all of the

transformer
designs and design equipment from Peter Dahl. I am moving the equipment here to Ohio. Once all of the computer design work has been updated and cataloged, I will be selling Peter Dahl transformers and chokes.

I should be up and running in a couple months.

(snip)

MagCap will be building the transformers according to the original Peter Dahl designs and specs and will be sold by Harbach Electronics under the Peter W. Dahl name.

Regards,
Jeff Weinberg W8CQ
Harbach Electronics

http://www.harbachelectronics.com
I've heard great things about Jeff and his company from people I know and respect. To me this is a great day in Amateur Radio and I look forward to the future with Peter W Dahl firmly rooted in our hobby!
</blockquote>

--
Mike Andrews, W5EGO
mikea@mikea.ath.cx
Tired old sysadmin

844. Re: Other uses for Microwave oven transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-22 16:43:28 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <7d4d5cef-94b0-43c5-a85c-8aab712fce63@w40g2000yqd.googlegroups.com>
Source record: 2697

On Jun 21, 7:21 pm, terry <tsanf...@nf.sympatico.ca> wrote:
> Trying to clear out some 'junk' but have always tended to keep
> scrapped parts from old (UNREPAIRABLE/NOT-WORTH-FIXING) microwaves!
>
> e.g. the transformers, fans, fuse holders, overheat switches. And even
> occasionally have used some of them for repairs to other microwaves!
>
> I applied 115.7 volts AC to what had been the HV winding of one of
> these scrapped transf. recently and got about 6 volts on what had been
> the original primary. That established the ratio between the two
> windings as approx 20:1.
>
> Also a small voltage (about 0.185 volts) across what had been the
> magnetron (Approx. 3 volt?) heater winding. Which gives ratio of about
> 1:33 to the original primary winding; also a ratio of about 1:700 from
> the original HV winding.
>
> So the idea of using the transformer backwards comes to mind????
>
> Depending on the unit they are typically rated as follows?
>
> Input winding 115 volts at whatever total wattage of the magnetron
> circuit is. Assume say 1000 watts requiring about 8.7 amps primary
> current! Usually intermittent use.
>
> The original HV secondary operates at around 2200 volts, so 1000 watts
> (ignore the magnetron heater current for a moment) would average about
> 400 to 500 milliamps? And pretty peaky because of the half wave high
> voltage doubling circuit???
>
> More moderately; at 115 volts and say 400 m/a into the old HV winding
> the transformer might be able to supply around 6 volts at around 5 to
> 7 amps from what used to be the 115 volt primary?
> Or at 115v/250 m/a maybe 3 to 5 amps? For 6.3v heaters?
>
> Alternatively could such an ex-microwave power transformer be used in
> the plate circuit (non-push/pull) of an audio amp using say a 6v6 or
> 6L6 (perhaps triode connected?) with a DC plate current of 45 to 75
> milliamps?
>
> Thus in such an arrangement the 20:1 ratio to the original primary
> could provide something of a match for an 8 ohm speaker? (20)^2 x 8 =
> 3200
>

> Problems; the laminations of such transformers do not seem to have air
> spaces as in some audio transformers carrying DC? The bottom (neutral)
> end of HV winding is sometimes at cabinet 'ground'. Hence a problem;
> unless the transformer is isolated and even then the transformer frame
> could be 'hot' whenever the unit is plugged in if that winding now
> used as the primary! Therefore unsafe.
>
> Have also heard of cutting off the old HV winding etc. and using the
> remainder of transformer to make battery charger; down rating a
> typical transformer to say 500 watts (continuous) for battery charging
> that's sort of around 30 to 40 amps at 12+ volts. Not sure what the
> turns per volt would be but should be possible to poke a few turns
> around the partially stripped core until one gets around 14 to 15
> volts RMS.
>
> This is all supposition at this stage! Any comments criticism????

They are a great source of a core and primary for DIY transformers.
Thes transformer were designed as a constant current source and have
magnetic shunts that must be removed for most power supply
applications

Jimmie

845. Re: Other uses for Microwave oven transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-22 17:47:32 UTC
From: Stray Dog <qcwa150@sdf.lonestar.org>
Message-ID: <Pine.NEB.4.64.0906221744310.26472@sdf.lonestar.org>
Source record: 2698

On Mon, 22 Jun 2009, mikea wrote:

> Date: Mon, 22 Jun 2009 10:55:05 -0500
> From: mikea <mikea@mikea.ath.cx>
> Newsgroups: rec.radio.amateur.homebrew
> Subject: Re: Other uses for Microwave oven transformers?
>
> Stray Dog <qcwa150@sdf.lonestar.org> wrote in
<Pine.NEB.4.64.0906221437010.10155@sdf.lonestar.org>:
>
>> In the end, I wound up buying my plate transformers at hamfests and also
>> one, new, made by Hammond in Canada. Peter Dahl is out of business, and
>> Ameritron (I think) will sell plate transformers and some are reasonably
>> priced for the power and voltage. Fair Radio Sales (Lima, Ohio) and
>> Radio-Daze (NY) are two that sell Hammond transformers, including large
>> plate transformers (many types, specs all over the map, too).
>
> Well, yes, Peter is out of the business, but the transformers and other
> items are still being built to his specs:
>
> <http://forums.qrz.com/showthread.php?t=153611?
>
> <blockquote>
> Peter Dahl Company has NOT been sold. It is NOT moving across the border
> to Mexico. Gary no longer works for the them. The Peter Dahl Company has
> stopped production, is closing their doors, and will become part of
> Amateur Radio History!
>
> But the NAME lives on!
>
> Jeff Weinberg, W8CQ of Harbach Electronics, has purchased the rights to
> the name, the original transformer and choke specifications and designs,
> and the design equipment.
>
> The transformers will be built by MagCap Engineering using the original
> PWD specs, and sold through Harbach Electronics under the Peter Dahl
> name. The transformer and chokes will be FOB Canton, MA and shipped
> directly to the customer from MagCap.
>
> This is great news for the Amateur Radio Community and a great way to
> memorialize the Peter Dahl Company who's innovations and designs have
> brought so much to our hobby.
>
> To nullify any further rumors or innuendos about the status or future of

> the Peter W Dahl Company, let me share the following e-mail with you
> (edited for content)...
>
> Quote:
> Re: Harbach Electronics and Peter Dahl
> From: "Jeff Weinberg W8CQ"
> Date: Wed, February 20, 2008 2:30 pm
> To: "Dino Darling"
>
> Hi Dino,
> Yes, the deal is finally completed. I have purchased all of the
> transformer
> designs and design equipment from Peter Dahl. I am moving the equipment
> here to Ohio. Once all of the computer design work has been updated and
> cataloged, I will be selling Peter Dahl transformers and chokes.
>
> I should be up and running in a couple months.
>
> (snip)
>
> MagCap will be building the transformers according to the original Peter
> Dahl designs and specs and will be sold by Harbach Electronics under the
> Peter W. Dahl name.
>
> Regards,
> Jeff Weinberg W8CQ
> Harbach Electronics
>
> http://www.harbachelectronics.com
> I've heard great things about Jeff and his company from people I know
> and respect. To me this is a great day in Amateur Radio and I look
> forward to the future with Peter W Dahl firmly rooted in our hobby!
> </blockquote>
>
> --
> Mike Andrews, W5EGO
> mikea@mikea.ath.cx
> Tired old sysadmin
>

Thanks for the info. It goes beyond what came out in QST at the time and that was that production was going to end, period. There was no hint at all in the QST anouncement that there was even any possibility for continuation.

846. IC's to finish some projects.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-22 21:32:30 UTC
From: Mike Lucas <w5chr@bellsouth.net>
Message-ID: <fGS%l.14151$he4.7739@bignews3.bellsouth.net>
Source record: 2699

Before I come down with CRS syndrome, I'd like to complete some
projects started in the early 70's. (!!!!!) Looking for National LM300
series IC's,
ie LM371, LM372, LM373, LM375. If you have any of these critters in can or
dip package, and they need a new home, email me with details please.
Cheap is great, free is even better.

Mike W5CHR
Memphis, Tenn

847. Re: IC's to finish some projects.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-22 22:53:17 UTC
From: Dave M <masondg4499@comcast.net>
Message-ID: <YLqdnbkSzb7Alt3XnZ2dnUVZ_tednZ2d@giganews.com>
Source record: 2700

"Mike Lucas" <w5chr@bellsouth.net> wrote in message
news:fGS%l.14151$he4.7739@bignews3.bellsouth.net...
> Before I come down with CRS syndrome, I'd like to complete some
> projects started in the early 70's. (!!!!!) Looking for National LM300
> series IC's,
> ie LM371, LM372, LM373, LM375. If you have any of these critters in can or
> dip package, and they need a new home, email me with details please.
> Cheap is great, free is even better.
>
> Mike W5CHR
> Memphis, Tenn
>

The only part that I could find anywhere was the LM373 at
http://www.unicornelectronics.com/IC/LINEAR.html. They have several other
LM3xx ICs on the list, but none of the parts you're looking for.
Your projects might be DIW if no one has them in their junquebox. What are
your projects? Might be a workaround for some of the unobtanium parts.

Cheeers

Dave M

848. Re: IC's to finish some projects.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-22 23:28:33 UTC
From: Mike Lucas <w5chr@bellsouth.net>
Message-ID: <UpU%l.58311$qa.14778@bignews4.bellsouth.net>
Source record: 2551

"Dave M" <masondg4499@comcast.net> wrote in message >
> Your projects might be DIW if no one has them in their junquebox. What
> are your projects? Might be a workaround for some of the unobtanium
> parts.
>
Dave: Lots of projects, so little time and money! The LM373 is for a simple
SSB receiver for 3600-3800. HR in the early and mid 70's had a bunch
of projects using this chip, and I have everything needed to build a
nostalgia
receiver. I have read lots of bad stuff about the chip, how the audio is
distorted,
poor agc, etc, but I want to hear it for myself

Tnx for your recommend of Unicorn Electronics. I bought 1 of the LM373,
several of the 3911 Temp controller chips and some other obsolete IC's
at reasonable prices, just last month from them. Mike's Hobby, Warrenvill,
Il.
had a few LM series chips, and I cleaned them out last week.

All of the 300 series chips are available in big lots through the Evil
Chip-Mongers,
but onezies are difficult to locate.

Thanks for the post, Dave, I'll let the group know how the project turns out

Mike W5CHR
Memphis.

849. Re: IC's to finish some projects.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-23 02:18:53 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnh40esd.2mhb.bit-bucket@shell.config.com>
Source record: 2552

On Mon, 22 Jun 2009 18:28:33 -0500, Mike Lucas wrote:
> "Dave M" <masondg4499@comcast.net> wrote in message >
>> Your projects might be DIW if no one has them in their junquebox. What
>> are your projects? Might be a workaround for some of the unobtanium
>> parts.
>>
> Dave: Lots of projects, so little time and money! The LM373 is for a simple
> SSB receiver for 3600-3800. HR in the early and mid 70's had a bunch
> of projects using this chip, and I have everything needed to build a
> nostalgia
> receiver. I have read lots of bad stuff about the chip, how the audio is
> distorted,
> poor agc, etc, but I want to hear it for myself
>
> Tnx for your recommend of Unicorn Electronics. I bought 1 of the LM373,
> several of the 3911 Temp controller chips and some other obsolete IC's
> at reasonable prices, just last month from them. Mike's Hobby, Warrenvill,
> Il.
> had a few LM series chips, and I cleaned them out last week.
>
> All of the 300 series chips are available in big lots through the Evil
> Chip-Mongers,
> but onezies are difficult to locate.

Always keep in mind:

http://www.danssmallpartsandkits.net/

Jonesy

850. Re: Other uses for Microwave oven transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-23 21:22:09 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <48d33da4-4852-4662-b4f1-e4fc3f6ac294@x6g2000prc.googlegroups.com>
Source record: 2553

On Jun 22, 1:47 pm, Stray Dog <qcwa...@sdf.lonestar.org> wrote:
> On Mon, 22 Jun 2009, mikea wrote:
> > Date: Mon, 22 Jun 2009 10:55:05 -0500
> > From: mikea <mi...@mikea.ath.cx>
> > Newsgroups: rec.radio.amateur.homebrew
> > Subject: Re: Other uses for Microwave oven transformers?
>
> > Stray Dog <qcwa...@sdf.lonestar.org> wrote in
<Pine.NEB.4.64.0906221437010.10...@sdf.lonestar.org>:
>
> >> In the end, I wound up buying my plate transformers at hamfests and also
> >> one, new, made by Hammond in Canada. Peter Dahl is out of business, and
> >> Ameritron (I think) will sell plate transformers and some are reasonably
> >> priced for the power and voltage. Fair Radio Sales (Lima, Ohio) and
> >> Radio-Daze (NY) are two that sell Hammond transformers, including large
> >> plate transformers (many types, specs all over the map, too).
>
> > Well, yes, Peter is out of the business, but the transformers and other
> > items are still being built to his specs:
>
> > <http://forums.qrz.com/showthread.php?t=153611?
>
> > <blockquote>
> > Peter Dahl Company has NOT been sold. It is NOT moving across the border
> > to Mexico. Gary no longer works for the them. The Peter Dahl Company has
> > stopped production, is closing their doors, and will become part of
> > Amateur Radio History!
>
> > But the NAME lives on!
>
> > Jeff Weinberg, W8CQ of Harbach Electronics, has purchased the rights to
> > the name, the original transformer and choke specifications and designs,
> > and the design equipment.
>
> > The transformers will be built by MagCap Engineering using the original
> > PWD specs, and sold through Harbach Electronics under the Peter Dahl
> > name. The transformer and chokes will be FOB Canton, MA and shipped
> > directly to the customer from MagCap.
>
> > This is great news for the Amateur Radio Community and a great way to
> > memorialize the Peter Dahl Company who's innovations and designs have
> > brought so much to our hobby.
>
> > To nullify any further rumors or innuendos about the status or future of

> > the Peter W Dahl Company, let me share the following e-mail with you
> > (edited for content)...
>
> > Quote:
> > Re: Harbach Electronics and Peter Dahl
> > From: "Jeff Weinberg W8CQ"
> > Date: Wed, February 20, 2008 2:30 pm
> > To: "Dino Darling"
>
> > Hi Dino,
> > Yes, the deal is finally completed. I have purchased all of the
> > transformer
> > designs and design equipment from Peter Dahl. I am moving the equipment
> > here to Ohio. Once all of the computer design work has been updated and
> > cataloged, I will be selling Peter Dahl transformers and chokes.
>
> > I should be up and running in a couple months.
>
> > (snip)
>
> > MagCap will be building the transformers according to the original Peter
> > Dahl designs and specs and will be sold by Harbach Electronics under the
> > Peter W. Dahl name.
>
> > Regards,
> > Jeff Weinberg W8CQ
> > Harbach Electronics
>
> >http://www.harbachelectronics.com
> > I've heard great things about Jeff and his company from people I know
> > and respect. To me this is a great day in Amateur Radio and I look
> > forward to the future with Peter W Dahl firmly rooted in our hobby!
> > </blockquote>
>
> > --
> > Mike Andrews, W5EGO
> > mi...@mikea.ath.cx
> > Tired old sysadmin
>
> Thanks for the info. It goes beyond what came out in QST at the time and
> that was that production was going to end, period. There was no hint at
> all in the QST anouncement that there was even any possibility for
> continuation.

Hey OM:

The only way to do them is to tear them down to the lams re insulate
the lams and re stack them.

Only because they put weld shunt shorts on the lams that act as
shorted windings, plus the welds hold the lams together, because they

don't interweave them.

73 OM
de n8zu

851. Re: Filter choke specs

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-24 05:03:41 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <3ib345h0a19jhag2k7gql85aoothao0dkm@4ax.com>
Source record: 2554

On Tue, 23 Jun 2009 13:44:24 -0700 (PDT), raypsi <RBorowiak@gmail.com>
wrote:

>I would steal a page from the japanesse, they came out with the best
>regulators by swamping components down.
>
>In this case they would swamp the inductor with a power resistor. I've
>never seen this tech used by anybody else, except in the orient.
>
>So to gain the extra current all you have to do is parallel a resistor
>across the choke.
>
>Even resistors will regulate, smart darn japanesse.
>
>So all the resistor has to do is soak up the other 250ma with a power
>rating that it can handle the current and voltage.
>
>You could even make it adjustable slider type so it could be tweaked.

In the OP's case, the swamping resistor would have to about twice the
DC resistance of the choke to get about 2:1 current share between the
choke and the resistor. These resistances are typically in the order
of a few ohms.

Looking at the ripple frequencies 100/120 Hz and their harmonics, the
inductive reactance for 5 H is in the order of kilo-ohms. A swamping
resistor of a few ohms would be practically a short circuit across the
choke.

Paul OH3LWR

852. Re: Other uses for Microwave oven transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-24 13:57:12 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <4cec2556-388c-4105-a289-94c00eab5445@l28g2000vba.googlegroups.com>
Source record: 2555

```
On Jun 23, 5:22 pm, raypsi <RBorow...@gmail.com> wrote:
> On Jun 22, 1:47 pm, Stray Dog <qcwa...@sdf.lonestar.org> wrote:
>
>
>
>
>
> > On Mon, 22 Jun 2009, mikea wrote:
> > > Date: Mon, 22 Jun 2009 10:55:05 -0500
> > > From: mikea <mi...@mikea.ath.cx>
> > > Newsgroups: rec.radio.amateur.homebrew
> > > Subject: Re: Other uses for Microwave oven transformers?
>
> > > Stray Dog <qcwa...@sdf.lonestar.org> wrote in
<Pine.NEB.4.64.0906221437010.10...@sdf.lonestar.org>:
>
> > >> In the end, I wound up buying my plate transformers at hamfests and also
> > >> one, new, made by Hammond in Canada. Peter Dahl is out of business, and
> > >> Ameritron (I think) will sell plate transformers and some are reasonably
> > >> priced for the power and voltage. Fair Radio Sales (Lima, Ohio) and
> > >> Radio-Daze (NY) are two that sell Hammond transformers, including large
> > >> plate transformers (many types, specs all over the map, too).
>
> > > Well, yes, Peter is out of the business, but the transformers and other
> > > items are still being built to his specs:
>
> > > <http://forums.qrz.com/showthread.php?t=153611?
>
> > > <blockquote>
> > > Peter Dahl Company has NOT been sold. It is NOT moving across the border
> > > to Mexico. Gary no longer works for the them. The Peter Dahl Company has
> > > stopped production, is closing their doors, and will become part of
> > > Amateur Radio History!
>
> > > But the NAME lives on!
>
> > > Jeff Weinberg, W8CQ of Harbach Electronics, has purchased the rights to
> > > the name, the original transformer and choke specifications and designs,
> > > and the design equipment.
>
> > > The transformers will be built by MagCap Engineering using the original
> > > PWD specs, and sold through Harbach Electronics under the Peter Dahl
> > > name. The transformer and chokes will be FOB Canton, MA and shipped
> > > directly to the customer from MagCap.
```

>
> > > This is great news for the Amateur Radio Community and a great way to
> > > memorialize the Peter Dahl Company who's innovations and designs have
> > > brought so much to our hobby.
>
> > > To nullify any further rumors or innuendos about the status or future of
> > > the Peter W Dahl Company, let me share the following e-mail with you
> > > (edited for content)...
>
> > > Quote:
> > > Re: Harbach Electronics and Peter Dahl
> > > From: "Jeff Weinberg W8CQ"
> > > Date: Wed, February 20, 2008 2:30 pm
> > > To: "Dino Darling"
>
> > > Hi Dino,
> > > Yes, the deal is finally completed. I have purchased all of the
> > > transformer
> > > designs and design equipment from Peter Dahl. I am moving the equipment
> > > here to Ohio. Once all of the computer design work has been updated and
> > > cataloged, I will be selling Peter Dahl transformers and chokes.
>
> > > I should be up and running in a couple months.
>
> > > (snip)
>
> > > MagCap will be building the transformers according to the original Peter
> > > Dahl designs and specs and will be sold by Harbach Electronics under the
> > > Peter W. Dahl name.
>
> > > Regards,
> > > Jeff Weinberg W8CQ
> > > Harbach Electronics
>
> > >http://www.harbachelectronics.com
> > > I've heard great things about Jeff and his company from people I know
> > > and respect. To me this is a great day in Amateur Radio and I look
> > > forward to the future with Peter W Dahl firmly rooted in our hobby!
> > > </blockquote>
>
> > > --
> > > Mike Andrews, W5EGO
> > > mi...@mikea.ath.cx
> > > Tired old sysadmin
>
> > Thanks for the info. It goes beyond what came out in QST at the time and
> > that was that production was going to end, period. There was no hint at
> > all in the QST anouncement that there was even any possibility for
> > continuation.
>

> Hey OM:
>
> The only way to do them is to tear them down to the lams re insulate
> the lams and re stack them.
>
> Only because they put weld shunt shorts on the lams that act as
> shorted windings, plus the welds hold the lams together, because they
> don't interweave them.
>
> 73 OM
> de n8zu- Hide quoted text -
>
> - Show quoted text -

I f you can find some of the older ones and they are getting harder to find you can just knock the shunts out with a hammer and punch. I have given some thought to trying cutting the welds out but I havent had a project lately that I am in that desperate of a need of a transformer..

Jimmie

853. Re: Other uses for Microwave oven transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-24 18:23:52 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <99b5206e-cc35-4022-8a9c-5a6693203cbe@x6g2000prc.googlegroups.com>
Source record: 2556

On Jun 24, 9:57 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> On Jun 23, 5:22 pm, raypsi <RBorow...@gmail.com> wrote:
>
>
>
> > On Jun 22, 1:47 pm, Stray Dog <qcwa...@sdf.lonestar.org> wrote:
>
> > > On Mon, 22 Jun 2009, mikea wrote:
> > > > Date: Mon, 22 Jun 2009 10:55:05 -0500
> > > > From: mikea <mi...@mikea.ath.cx>
> > > > Newsgroups: rec.radio.amateur.homebrew
> > > > Subject: Re: Other uses for Microwave oven transformers?
>
> > > > Stray Dog <qcwa...@sdf.lonestar.org> wrote in
<Pine.NEB.4.64.0906221437010.10...@sdf.lonestar.org>:
>
> > > >> In the end, I wound up buying my plate transformers at hamfests and also
> > > >> one, new, made by Hammond in Canada. Peter Dahl is out of business, and
> > > >> Ameritron (I think) will sell plate transformers and some are reasonably
> > > >> priced for the power and voltage. Fair Radio Sales (Lima, Ohio) and
> > > >> Radio-Daze (NY) are two that sell Hammond transformers, including large
> > > >> plate transformers (many types, specs all over the map, too).
>
> > > > Well, yes, Peter is out of the business, but the transformers and other
> > > > items are still being built to his specs:
>
> > > > <http://forums.qrz.com/showthread.php?t=153611?
>
> > > > <blockquote>
> > > > Peter Dahl Company has NOT been sold. It is NOT moving across the border
> > > > to Mexico. Gary no longer works for the them. The Peter Dahl Company has
> > > > stopped production, is closing their doors, and will become part of
> > > > Amateur Radio History!
>
> > > > But the NAME lives on!
>
> > > > Jeff Weinberg, W8CQ of Harbach Electronics, has purchased the rights to
> > > > the name, the original transformer and choke specifications and designs,
> > > > and the design equipment.
>
> > > > The transformers will be built by MagCap Engineering using the original
> > > > PWD specs, and sold through Harbach Electronics under the Peter Dahl
> > > > name. The transformer and chokes will be FOB Canton, MA and shipped
> > > > directly to the customer from MagCap.

>
> > > > This is great news for the Amateur Radio Community and a great way to
> > > > memorialize the Peter Dahl Company who's innovations and designs have
> > > > brought so much to our hobby.
>
> > > > To nullify any further rumors or innuendos about the status or future of
> > > > the Peter W Dahl Company, let me share the following e-mail with you
> > > > (edited for content)...
>
> > > > Quote:
> > > > Re: Harbach Electronics and Peter Dahl
> > > > From: "Jeff Weinberg W8CQ"
> > > > Date: Wed, February 20, 2008 2:30 pm
> > > > To: "Dino Darling"
>
> > > > Hi Dino,
> > > > Yes, the deal is finally completed. I have purchased all of the
> > > > transformer
> > > > designs and design equipment from Peter Dahl. I am moving the equipment
> > > > here to Ohio. Once all of the computer design work has been updated and
> > > > cataloged, I will be selling Peter Dahl transformers and chokes.
>
> > > > I should be up and running in a couple months.
>
> > > > (snip)
>
> > > > MagCap will be building the transformers according to the original Peter
> > > > Dahl designs and specs and will be sold by Harbach Electronics under the
> > > > Peter W. Dahl name.
>
> > > > Regards,
> > > > Jeff Weinberg W8CQ
> > > > Harbach Electronics
>
> > > >http://www.harbachelectronics.com
> > > > I've heard great things about Jeff and his company from people I know
> > > > and respect. To me this is a great day in Amateur Radio and I look
> > > > forward to the future with Peter W Dahl firmly rooted in our hobby!
> > > > </blockquote>
>
> > > > --
> > > > Mike Andrews, W5EGO
> > > > mi...@mikea.ath.cx
> > > > Tired old sysadmin
>
> > > Thanks for the info. It goes beyond what came out in QST at the time and
> > > that was that production was going to end, period. There was no hint at
> > > all in the QST anouncement that there was even any possibility for
> > > continuation.
>

> > Hey OM:
>
> > The only way to do them is to tear them down to the lams re insulate
> > the lams and re stack them.
>
> > Only because they put weld shunt shorts on the lams that act as
> > shorted windings, plus the welds hold the lams together, because they
> > don't interweave them.
>
> > 73 OM
> > de n8zu- Hide quoted text -
>
> > - Show quoted text -
>
> I f you can find some of the older ones and they are getting harder to
> find you can just knock the shunts out with a hammer and punch. I have
> given some thought to trying cutting the welds out but I havent had a
> project lately that I am in that desperate of a need of a
> transformer..
>
> Jimmie

Hey OM:

I grind the shorts off on a grinder with 6 inch diameter grind stones. Then I have to take the burrs off each lam. All the bear metal has to be insulated. Then you can make like Tesla and series 3 transformers. Talk about the air becoming alive. 7500 volts AC will show you how much leakage there is in the air.

854. Re: Other uses for Microwave oven transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-25 00:56:34 UTC
From: stan <tsanford@nf.sympatico.ca>
Message-ID: <11b9bcf0-079b-4bde-a43a-d97feb6f9105@s6g2000vbp.googlegroups.com>
Source record: 2557

```
On Jun 24, 4:23 pm, raypsi <RBorow...@gmail.com> wrote:
> On Jun 24, 9:57 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
>
>
>
>
>
> > On Jun 23, 5:22 pm, raypsi <RBorow...@gmail.com> wrote:
>
> > > On Jun 22, 1:47 pm, Stray Dog <qcwa...@sdf.lonestar.org> wrote:
>
> > > > On Mon, 22 Jun 2009, mikea wrote:
> > > > > Date: Mon, 22 Jun 2009 10:55:05 -0500
> > > > > From: mikea <mi...@mikea.ath.cx>
> > > > > Newsgroups: rec.radio.amateur.homebrew
> > > > > Subject: Re: Other uses for Microwave oven transformers?
>
> > > > > Stray Dog <qcwa...@sdf.lonestar.org> wrote in
<Pine.NEB.4.64.0906221437010.10...@sdf.lonestar.org>:
>
> > > > >> In the end, I wound up buying my plate transformers at hamfests and also
> > > > >> one, new, made by Hammond in Canada. Peter Dahl is out of business, and
> > > > >> Ameritron (I think) will sell plate transformers and some are reasonably
> > > > >> priced for the power and voltage. Fair Radio Sales (Lima, Ohio) and
> > > > >> Radio-Daze (NY) are two that sell Hammond transformers, including large
> > > > >> plate transformers (many types, specs all over the map, too).
>
> > > > > Well, yes, Peter is out of the business, but the transformers and other
> > > > > items are still being built to his specs:
>
> > > > > <http://forums.qrz.com/showthread.php?t=153611?
>
> > > > > <blockquote>
> > > > > Peter Dahl Company has NOT been sold. It is NOT moving across the border
> > > > > to Mexico. Gary no longer works for the them. The Peter Dahl Company has
> > > > > stopped production, is closing their doors, and will become part of
> > > > > Amateur Radio History!
>
> > > > > But the NAME lives on!
>
> > > > > Jeff Weinberg, W8CQ of Harbach Electronics, has purchased the rights to
> > > > > the name, the original transformer and choke specifications and designs,
> > > > > and the design equipment.
>
```

> > > > > The transformers will be built by MagCap Engineering using the original
> > > > > PWD specs, and sold through Harbach Electronics under the Peter Dahl
> > > > > name. The transformer and chokes will be FOB Canton, MA and shipped
> > > > > directly to the customer from MagCap.
>
> > > > > This is great news for the Amateur Radio Community and a great way to
> > > > > memorialize the Peter Dahl Company who's innovations and designs have
> > > > > brought so much to our hobby.
>
> > > > > To nullify any further rumors or innuendos about the status or future of
> > > > > the Peter W Dahl Company, let me share the following e-mail with you
> > > > > (edited for content)...
>
> > > > > Quote:
> > > > > Re: Harbach Electronics and Peter Dahl
> > > > > From: "Jeff Weinberg W8CQ"
> > > > > Date: Wed, February 20, 2008 2:30 pm
> > > > > To: "Dino Darling"
>
> > > > > Hi Dino,
> > > > > Yes, the deal is finally completed. I have purchased all of the
> > > > > transformer
> > > > > designs and design equipment from Peter Dahl. I am moving the equipment
> > > > > here to Ohio. Once all of the computer design work has been updated and
> > > > > cataloged, I will be selling Peter Dahl transformers and chokes.
>
> > > > > I should be up and running in a couple months.
>
> > > > > (snip)
>
> > > > > MagCap will be building the transformers according to the original Peter
> > > > > Dahl designs and specs and will be sold by Harbach Electronics under the
> > > > > Peter W. Dahl name.
>
> > > > > Regards,
> > > > > Jeff Weinberg W8CQ
> > > > > Harbach Electronics
>
> > > > >http://www.harbachelectronics.com
> > > > > I've heard great things about Jeff and his company from people I know
> > > > > and respect. To me this is a great day in Amateur Radio and I look
> > > > > forward to the future with Peter W Dahl firmly rooted in our hobby!
> > > > > </blockquote>
>
> > > > > --
> > > > > Mike Andrews, W5EGO
> > > > > mi...@mikea.ath.cx
> > > > > Tired old sysadmin
>
> > > > Thanks for the info. It goes beyond what came out in QST at the time and

> > > > that was that production was going to end, period. There was no hint at
> > > > all in the QST anouncement that there was even any possibility for
> > > > continuation.
>
> > > Hey OM:
>
> > > The only way to do them is to tear them down to the lams re insulate
> > > the lams and re stack them.
>
> > > Only because they put weld shunt shorts on the lams that act as
> > > shorted windings, plus the welds hold the lams together, because they
> > > don't interweave them.
>
> > > 73 OM
> > > de n8zu- Hide quoted text -
>
> > > - Show quoted text -
>
> > I f you can find some of the older ones and they are getting harder to
> > find you can just knock the shunts out with a hammer and punch. I have
> > given some thought to trying cutting the welds out but I haven't had a
> > project lately that I am in that desperate of a need of a
> > transformer..
>
> > Jimmie
>
> Hey OM:
>
> I grind the shorts off on a grinder with 6 inch diameter grind stones.
> Then I have to take the burrs off each lam. All the bear metal has to
> be insulated. Then you can make like Tesla and series 3 transformers.
> Talk about the air becoming alive. 7500 volts AC will show you how
> much leakage there is in the air.- Hide quoted text -
>
> - Show quoted text -

Years ago, to my regret (got fed up with stubbing toes on oversize
door stop) I dumped a 115 volt input neon sign transformer that was
capable (IIRC) of some 15,000 volts?
Great big insulators on each end. Probably a few milliamps output.
Don't see them 'open wired' to the neon signs any more as we did many
years ago?

855. Re: Filter choke specs

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-26 03:32:58 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <fe22c442-b836-4927-a31b-80d55bf41e1f@q37g2000vbi.googlegroups.com>
Source record: 2558

On Jun 24, 1:03 am, Paul Keinanen <keina...@sci.fi> wrote:
> On Tue, 23 Jun 2009 13:44:24 -0700 (PDT), raypsi <RBorow...@gmail.com>
> wrote:
>
> >I would steal a page from the japanesse, they came out with the best
> >regulators by swamping components down.
>
> >In this case they would swamp the inductor with a power resistor. I've
> >never seen this tech used by anybody else, except in the orient.
>
> >So to gain the extra current all you have to do is parallel a resistor
> >across the choke.
>
> >Even resistors will regulate, smart darn japanesse.
>
> >So all the resistor has to do is soak up the other 250ma with a power
> >rating that it can handle the current and voltage.
>
> >You could even make it adjustable slider type so it could be tweaked.
>
> In the OP's case, the swamping resistor would have to about twice the
> DC resistance of the choke to get about 2:1 current share between the
> choke and the resistor. These resistances are typically in the order
> of a few ohms.
>
> Looking at the ripple frequencies 100/120 Hz and their harmonics, the
> inductive reactance for 5 H is in the order of kilo-ohms. A swamping
> resistor of a few ohms would be practically a short circuit across the
> choke.
>
> Paul OH3LWR

Hey OM:

Now for the rest of the story: use a high voltage FET 2Amp at 800V
across the choke and regulate it with a LM431, programmable Zener.
I has a EICO Triband HF rig model 753, it's power supply uses 2
chokes, I regulate the outputs: 790 Volts to the final and 275 Volts
to the rest of the rig. Solid as a brick outhouse. The chokes take
most of the load off the FET's. So if the chokes saturate the FET's
take over. With all the mods I done to the EICO 753's regulating the
DC outputs is best.

73 OM

de n8zu

856. Re: Filter choke specs

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-26 15:39:10 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <40664f63-9b44-4b2b-80d2-1bfb9dcec1f9@f10g2000vbf.googlegroups.com>
Source record: 2559

On Jun 25, 11:32 pm, raypsi <RBorow...@gmail.com> wrote:
> Now for the rest of the story: use a high voltage FET 2Amp at 800V
> across the choke and regulate it with a LM431, programmable Zener.
> I has a EICO Triband HF rig model 753, it's power supply uses 2
> chokes, I regulate the outputs: 790 Volts to the final and 275 Volts
> to the rest of the rig. Solid as a brick outhouse. The chokes take
> most of the load off the FET's. So if the chokes saturate the FET's
> take over. With all the mods I done to the EICO 753's regulating the
> DC outputs is best.

Ha! Hotmodding an Eico 753. Sorta like putting a supercharger on a Yugo :-). I can see how both could be fun, in a kinda subversive "it should've never been sold in the first place, and I'm now going to take it to the extreme!" sense!

Tim N3QE

857. Re: FS - my Hendricks Scout

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-26 23:45:39 UTC
From: Bill M <radioexray@geemail.com>
Message-ID: <h23mj5016n4@news6.newsguy.com>
Source record: 2560

Bill M wrote:
> Great little receiver. Nothing that needs any apology. I've just become
> more focused on my HB Kitchin receiver and hate to see the Scout sitting
> here without a daily walk.
>
> No problems with it. I sucked out the 'kit building' factor so I'll go
> less than the retail price. 35 USD sound ok? Plus shipping, call it $5
> in the US.
>
> Inquire to radioexray@gmail.com
>
> -Bill, WX4A
>

The Scout Receiver has been sold.

Tnx,
Bill

858. Re: Other uses for Microwave oven transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-06-27 18:07:05 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <cabee138-7b14-4264-94a7-2a58d64f2cfa@g19g2000yql.googlegroups.com>
Source record: 2561

On Jun 24, 8:56 pm, stan <tsanf...@nf.sympatico.ca> wrote:
> On Jun 24, 4:23 pm, raypsi <RBorow...@gmail.com> wrote:
>
>
>
>
>
> > On Jun 24, 9:57 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
>
> > > On Jun 23, 5:22 pm, raypsi <RBorow...@gmail.com> wrote:
>
> > > > On Jun 22, 1:47 pm, Stray Dog <qcwa...@sdf.lonestar.org> wrote:
>
> > > > > On Mon, 22 Jun 2009, mikea wrote:
> > > > > > Date: Mon, 22 Jun 2009 10:55:05 -0500
> > > > > > From: mikea <mi...@mikea.ath.cx>
> > > > > > Newsgroups: rec.radio.amateur.homebrew
> > > > > > Subject: Re: Other uses for Microwave oven transformers?
>
> > > > > > Stray Dog <qcwa...@sdf.lonestar.org> wrote in
<Pine.NEB.4.64.0906221437010.10...@sdf.lonestar.org>:
>
> > > > > >> In the end, I wound up buying my plate transformers at hamfests and also
> > > > > >> one, new, made by Hammond in Canada. Peter Dahl is out of business, and
> > > > > >> Ameritron (I think) will sell plate transformers and some are reasonably
> > > > > >> priced for the power and voltage. Fair Radio Sales (Lima, Ohio) and
> > > > > >> Radio-Daze (NY) are two that sell Hammond transformers, including large
> > > > > >> plate transformers (many types, specs all over the map, too).
>
> > > > > > Well, yes, Peter is out of the business, but the transformers and other
> > > > > > items are still being built to his specs:
>
> > > > > > <http://forums.qrz.com/showthread.php?t=153611?
>
> > > > > > <blockquote>
> > > > > > Peter Dahl Company has NOT been sold. It is NOT moving across the border
> > > > > > to Mexico. Gary no longer works for the them. The Peter Dahl Company has
> > > > > > stopped production, is closing their doors, and will become part of
> > > > > > Amateur Radio History!
>
> > > > > > But the NAME lives on!
>
> > > > > > Jeff Weinberg, W8CQ of Harbach Electronics, has purchased the rights to
> > > > > > the name, the original transformer and choke specifications and designs,

> > > > > > and the design equipment.
>
> > > > > > The transformers will be built by MagCap Engineering using the original
> > > > > > PWD specs, and sold through Harbach Electronics under the Peter Dahl
> > > > > > name. The transformer and chokes will be FOB Canton, MA and shipped
> > > > > > directly to the customer from MagCap.
>
> > > > > > This is great news for the Amateur Radio Community and a great way to
> > > > > > memorialize the Peter Dahl Company who's innovations and designs have
> > > > > > brought so much to our hobby.
>
> > > > > > To nullify any further rumors or innuendos about the status or future of
> > > > > > the Peter W Dahl Company, let me share the following e-mail with you
> > > > > > (edited for content)...
>
> > > > > > Quote:
> > > > > > Re: Harbach Electronics and Peter Dahl
> > > > > > From: "Jeff Weinberg W8CQ"
> > > > > > Date: Wed, February 20, 2008 2:30 pm
> > > > > > To: "Dino Darling"
>
> > > > > > Hi Dino,
> > > > > > Yes, the deal is finally completed. I have purchased all of the
> > > > > > transformer
> > > > > > designs and design equipment from Peter Dahl. I am moving the equipment
> > > > > > here to Ohio. Once all of the computer design work has been updated and
> > > > > > cataloged, I will be selling Peter Dahl transformers and chokes.
>
> > > > > > I should be up and running in a couple months.
>
> > > > > > (snip)
>
> > > > > > MagCap will be building the transformers according to the original Peter
> > > > > > Dahl designs and specs and will be sold by Harbach Electronics under the
> > > > > > Peter W. Dahl name.
>
> > > > > > Regards,
> > > > > > Jeff Weinberg W8CQ
> > > > > > Harbach Electronics
>
> > > > > >http://www.harbachelectronics.com
> > > > > > I've heard great things about Jeff and his company from people I know
> > > > > > and respect. To me this is a great day in Amateur Radio and I look
> > > > > > forward to the future with Peter W Dahl firmly rooted in our hobby!
> > > > > > </blockquote>
>
> > > > > > --
> > > > > > Mike Andrews, W5EGO
> > > > > > mi...@mikea.ath.cx
> > > > > > Tired old sysadmin

>
> > > > > Thanks for the info. It goes beyond what came out in QST at the time and
> > > > > that was that production was going to end, period. There was no hint at
> > > > > all in the QST anouncement that there was even any possibility for
> > > > > continuation.
>
> > > > Hey OM:
>
> > > > The only way to do them is to tear them down to the lams re insulate
> > > > the lams and re stack them.
>
> > > > Only because they put weld shunt shorts on the lams that act as
> > > > shorted windings, plus the welds hold the lams together, because they
> > > > don't interweave them.
>
> > > > 73 OM
> > > > de n8zu- Hide quoted text -
>
> > > > - Show quoted text -
>
> > > I f you can find some of the older ones and they are getting harder to
> > > find you can just knock the shunts out with a hammer and punch. I have
> > > given some thought to trying cutting the welds out but I haven't had a
> > > project lately that I am in that desperate of a need of a
> > > transformer..
>
> > > Jimmie
>
> > Hey OM:
>
> > I grind the shorts off on a grinder with 6 inch diameter grind stones.
> > Then I have to take the burrs off each lam. All the bear metal has to
> > be insulated. Then you can make like Tesla and series 3 transformers.
> > Talk about the air becoming alive. 7500 volts AC will show you how
> > much leakage there is in the air.- Hide quoted text -
>
> > - Show quoted text -
>
> Years ago, to my regret (got fed up with stubbing toes on oversize
> door stop) I dumped a 115 volt input neon sign transformer that was
> capable (IIRC) of some 15,000 volts?
> Great big insulators on each end. Probably a few milliamps output.
> Don't see them 'open wired' to the neon signs any more as we did many
> years ago?- Hide quoted text -
>
> - Show quoted text -

The local skating rink uses them. One toasted a couple of moonths ago
when someone splashed it with a milkshake.Fire Brigade was called. I
noticed the new transformer has a plexiglass cover . They are a lot of

fun to play with. I got my hands on one when I was about 12. I made an electric sword with it and an old automotive radio antenna. Touched my brother on the butt with it. I knew it would shock him, I didnt know he would collapse to the ground .My mother always wondered how I made it to adulthood.

Jimmie

859. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-01 06:00:02 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1246428001@panix.com>
Source record: 2562
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

860. How do on-chip 90 degree phase shifters work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-01 21:25:07 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <UuQ2m.288556$jp1.80689@en-nntp-06.dc1.easynews.com>
Source record: 2563

Would anyone happen to know how a chip like this one:
http://cds.linear.com/docs/Datasheet/5598f.pdf ...manages to generate an internal 90 degree phase shift from an LO input over the very wide range of 5MHz-1600MHz? The data sheet says it uses a "poly-phase phase shifter." I'm guessing... some adjustable analog phase shifters (that can provide up to 90 degrees of phase shift at 5MHz) that are controlled by a feedback loop that's looking to null the product of the LO and the (ostensibly 90 degree shifted) LO?

Seems like this is a bit easier to work with than chips that require 2x or 4x inputs to generate their 90 degree LO shifts!

Anyone have a favorite IQ modulator that'll work on 2m (and perhaps 70cm too)? The data sheet's detail of "industry standard pin-out" would suggest that there are others...

Thanks,
---Joel

861. Re: How do on-chip 90 degree phase shifters work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-02 01:49:03 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <ju-dnZk1Jr6Sj9HXnZ2dnUVZ_g1i4p2d@web-ster.com>
Source record: 2564

On Wed, 01 Jul 2009 14:25:07 -0700, Joel Koltner wrote:

> Would anyone happen to know how a chip like this one:
> http://cds.linear.com/docs/Datasheet/5598f.pdf ...manages to generate an
> internal 90 degree phase shift from an LO input over the very wide range
> of 5MHz-1600MHz? The data sheet says it uses a "poly-phase phase
> shifter." I'm guessing... some adjustable analog phase shifters (that
> can provide up to 90 degrees of phase shift at 5MHz) that are controlled
> by a feedback loop that's looking to null the product of the LO and the
> (ostensibly 90 degree shifted) LO?
>
> Seems like this is a bit easier to work with than chips that require 2x
> or 4x inputs to generate their 90 degree LO shifts!
>
> Anyone have a favorite IQ modulator that'll work on 2m (and perhaps 70cm
> too)? The data sheet's detail of "industry standard pin-out" would
> suggest that there are others...

When you find out, let us know...

--
http://www.wescottdesign.com

862. Re: How do on-chip 90 degree phase shifters work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-02 06:18:23 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <a97cf863-0852-42a9-9ba2-83e4e1cc816d@h2g2000yqg.googlegroups.com>
Source record: 2565

On Jul 1, 2:25 pm, "Joel Koltner" <zapwireDASHgro...@yahoo.com> wrote:
...
>
> Anyone have a favorite IQ modulator that'll work on 2m (and perhaps 70cm too)?
> The data sheet's detail of "industry standard pin-out" would suggest that
> there are others...
...

1GG7-4225?? :-)

Of course, there are others from places like Analog Devices, Hittite,
Maxim etc.

I'm not sure how they work, but suppose that something similar to
what's used for an audio phase shift network for use generating SSB
could be used. At RF frequencies, the capacitors would not be large,
and clearly it's not terribly difficult to integrate well-matched
capacitors (e.g. in ADC converters). Perhaps I can probe some of my
contacts to find out more...

Cheers,
Tom

863. Re: How do on-chip 90 degree phase shifters work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-02 16:40:32 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <5q53m.293009$jp1.98094@en-nntp-06.dc1.easynews.com>
Source record: 2566

"K7ITM" <k7itm@msn.com> wrote in message
news:a97cf863-0852-42a9-9ba2-83e4e1cc816d@h2g2000yqg.googlegroups.com...
"I'm not sure how they work, but suppose that something similar to
what's used for an audio phase shift network for use generating SSB
could be used."

I suspect it's actually something a bit simpler in that the LO is supposed to be one frequency (perhaps with harmonics) and not something that moves around quickly (hence the idea that you can just use a feedback loop and track it), whereas with audio you're dealing with a whole bunch of frequencies at once (in a sense) and have to phase-shift them all 90 degree simultaneously.

I was planning on designing (or at least implmenting -- all the real design was by those filter guys decades back) an audio phase shift network, but since you need an IQ (-like) modulator anyway, and since I already needed a microcontroller for this design, I'm thinking these days it's just as easy to perform a Hilbert transform inside the microcontroller and spit out the audio and it's phase-shifted version on two DAC pins and call it good.

---Joel

864. Z-Match circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-03 05:27:42 UTC
From: Claude Frantz <r31dmaeu@unibw.de>
Message-ID: <h2k4sf$gk5$1@news.mixmin.net>
Source record: 2567

You will find here
http://www.darc.de/distrikte/c/09/Claude/Z-Match.pdf
an article giving more information about the "single coil" Z-Match
circuit. In fact, the "single coil" is actually a coil assembly.

The article is long because it includes many figures.

Best 73 de Claude

865. Re: How do on-chip 90 degree phase shifters work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-04 06:25:08 UTC
From: Roger <sailtamarack@yahoo.ca>
Message-ID: <93d11638-e352-4a45-b509-8d9924e97e34@x25g2000prf.googlegroups.com>
Source record: 2568

Joel,

You might find some answers in these papers:

http://www.eecg.toronto.edu/~kphang/papers/2001/dong_IQphase.pdf

http://www.ee.ucla.edu/~razavi/papers/Conferences/RCICC97_1.pdf

Roger

866. Re: Linear Amplifier Plans 1-16 Pill On DVD

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-06 15:53:44 UTC
From: "KD8IMG, Robert Trendel, is a twice convicted stalker of women." <mopeyzakween@yahoo.com>
Message-ID: <f82eada0-dcb6-4c8b-90b2-de5cb9e8cd6a@i6g2000yqj.googlegroups.com>
Source record: 2569
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On May 15, 5:00 pm, "Roger & Suzanne Nair" <r&sn...@lycos.com> wrote:
> "KD8IMG, Robert Trendel, is a twice convicted stalker of women."<mopeyzakw...@yahoo.com>
wrote in message
>
> news:7a5421ab-79a2-4005-99f9-e6a812081d17@b1g2000vbc.googlegroups.com...
> On May 11, 2:13 pm, "kc8qjp" <cris...@hotmail.com> wrote:
>
>
>
>
>
> > This is the DVD every CB or Ham Radio Operator has been looking for who
> > likes to build their own Amplifiers.
>
> > 1 to 16 Pill AMP Designs.....................
>
> >http://cgi.ebay.com/Linear-Amplifier-Plans-1-16-Pill-On-DVD_W0QQitemZ...
>
> > Description
>
> > Item Specifics - Item Condition
> > Condition: New
>
> > This is the DVD every CB or Ham Radio Operator has been
> > looking for who likes to build their own Amplifiers.
>
> > 1 to 16 Pill AMP Designs
>
> > Step by Step directions
>
> > Full Schematics
>
> > Full Color Pics of step by step build of each Box 1-16
> > pill
>
> > Full Parts List for each Design
>
> > And most important were to by all the parts you need is
> > included.
>
> > This DVD makes it very easy for the Novice to build their
> > Own Box
>

> > This is just plans we are not selling anything but plans
> > on how to build these units and its for Educational Purpose only.
>
> > No Returns or Money back.Each DVD is checked before they
> > are shipped to make sure they work 100%
>
> > begin 666 s.gif
> > M1TE&.#EA`0`!`)'_`/___P```,# P ```"'Y! $```(`+ `````!``$```("
> > $5 $`.P``
> > `
> > end
> > The poster of this message is moparholic at hotmail.com...he is
> > forging a female ham's callsign
>
> Who in their right mind would want to pretend to be kc8qjp crisco kathy???
>
> http://wwwcsif.cs.ucdavis.edu/~loewen/fat-woman.jpg
>
> I don't want her
> you can have her
> she's too fat
> for me- Hide quoted text -
>
> - Show quoted text -

moparholic is Roger Nair of Winter Brook Dr. in Brunswick, Ohio...just
in case you did not know.

867. Re: Linear Amplifier Plans 1-16 Pill On DVD

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-06 15:53:50 UTC
From: "KD8IMG, Robert Trendel, is a twice convicted stalker of women." <mopeyzakween@yahoo.com>
Message-ID: <462b4c3c-2ef3-459d-8897-8e5a2b205612@h31g2000yqd.googlegroups.com>
Source record: 2570
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On May 15, 7:08 pm, "Dan Valdez" <dv...@yahoo.com> wrote:
> "Roger & Suzanne Nair" <r&sn...@lycos.com> wrote in
messagenews:gukl5rbqb2@news.mixmin.net...
>
>
>
>
>
> > "KD8IMG, Robert Trendel, is a twice convicted stalker of women."
> > <mopeyzakw...@yahoo.com> wrote in message
> >news:7a5421ab-79a2-4005-99f9-e6a812081d17@b1g2000vbc.googlegroups.com...
> > > On May 11, 2:13 pm, "kc8qjp" <cris...@hotmail.com> wrote:
> > >> This is the DVD every CB or Ham Radio Operator has been looking for who
> > >> likes to build their own Amplifiers.
> >
> > >> 1 to 16 Pill AMP Designs.....................
> >
> > >>http://cgi.ebay.com/Linear-Amplifier-Plans-1-16-Pill-On-DVD_W0QQitemZ...
> >
> > >> Description
> >
> > >> Item Specifics - Item Condition
> > >> Condition: New
> >
> > >> This is the DVD every CB or Ham Radio Operator has been
> > >> looking for who likes to build their own Amplifiers.
> >
> > >> 1 to 16 Pill AMP Designs
> >
> > >> Step by Step directions
> >
> > >> Full Schematics
> >
> > >> Full Color Pics of step by step build of each Box 1-16
> > >> pill
> >
> > >> Full Parts List for each Design
> >
> > >> And most important were to by all the parts you need is
> > >> included.
> >
> > >> This DVD makes it very easy for the Novice to build their
> > >> Own Box

>
> >> This is just plans we are not selling anything but plans
> >> on how to build these units and its for Educational Purpose only.
>
> >> No Returns or Money back.Each DVD is checked before they
> >> are shipped to make sure they work 100%
>
> >> begin 666 s.gif
> >> M1TE&.#EA`0`!`)'_`/___P```,# P ```"'Y! $```(`+ `````!``$```("
> >> $5 $`.P``
> >> `
> >> end
>
> >> The poster of this message is moparholic at hotmail.com...he is
> >> forging a female ham's callsign
>
> > Who in their right mind would want to pretend to be kc8qjp crisco kathy???
>
> >http://wwwcsif.cs.ucdavis.edu/~loewen/fat-woman.jpg
>
> > I don't want her
> > you can have her
> > she's too fat
> > for me
>
> Is kc8qjp out of prison again?- Hide quoted text -
>
> - Show quoted text -

moparholic is Roger Nair of Winter Brook Dr. in Brunswick, Ohio...just
in case you did not know.

868. Re: Linear Amplifier Plans 1-16 Pill On DVD

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-06 15:54:14 UTC
From: "KD8IMG, Robert Trendel, is a twice convicted stalker of women." <mopeyzakween@yahoo.com>
Message-ID: <b968e6b7-4688-46ba-b4cb-61526f4bb097@g1g2000yqh.googlegroups.com>
Source record: 2571
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On May 25, 10:32 pm, raypsi <RBorow...@gmail.com> wrote:
> On May 15, 7:08 pm, "Dan Valdez" <dv...@yahoo.com> wrote:
>
> > "Roger & Suzanne Nair" <r&sn...@lycos.com> wrote in
messagenews:gukl5rbqb2@news.mixmin.net...
>
> > Is kc8qjp out of prison again?-
>
> Hey OM
>
> She lives in the same area zip code looky the street view a real flag
> waver here:http://tinyurl.com/qnaxzn
>
> 73 OM
> de n8zu

moparholic is Roger Nair of Winter Brook Dr. in Brunswick, Ohio...just
in case you did not know.

869. Re: Linear Amplifier Plans 1-16 Pill On DVD

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-06 15:54:22 UTC
From: "KD8IMG, Robert Trendel, is a twice convicted stalker of women." <mopeyzakween@yahoo.com>
Message-ID: <dfce40a8-5abe-4eaa-8587-376eafa7f9e8@h18g2000yqj.googlegroups.com>
Source record: 2572
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On May 28, 12:09 pm, "Dan Valdez" <dv...@yahoo.com> wrote:
> "raypsi" <RBorow...@gmail.com> wrote in message
>
> news:01d627ca-7c8c-4eda-a243-c449ed34ca9c@d2g2000pra.googlegroups.com...
> On May 15, 7:08 pm, "Dan Valdez" <dv...@yahoo.com> wrote:
>
> > "Roger & Suzanne Nair" <r&sn...@lycos.com> wrote in
> > messagenews:gukl5rbqb2@news.mixmin.net...
>
> > Is kc8qjp out of prison again?-
>
> Hey OM
>
> She lives in the same area zip code looky the street view a real flag
> waver here:http://tinyurl.com/qnaxzn
>
> 73 OM
> de n8zu
>
> ============================
>
> It would appear her reputation has been soiled by N8WWM..
>
> http://www.google.com/search?hl=en&q=kc8qjp&btnG=Google+Search&aq=f&o...

moparholic is Roger Nair of Winter Brook Dr. in Brunswick, Ohio...just
in case you did not know.

870. Ham gear (used) cheap

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-06 16:22:46 UTC
From: Anon bozo <anon@bozo.to>
Message-ID: <0001HW.C67772E6007F6A94B08A39AF@news.sf.sbcglobal.net>
Source record: 2573
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

```
Friend is getting out of amateur:

http://dat7.com/sale/
```

871. Use old microwave cabinets?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-06 16:41:08 UTC
From: terry <tsanford@nf.sympatico.ca>
Message-ID: <b1038409-08d1-41f6-ab48-5b92cae0b5a6@c36g2000yqn.googlegroups.com>
Source record: 2574

Has anyone had the idea of (or actually used) scrapped microwaves as
equipment cabinets for home-brew projects?
Seeing a nice small stainless steel one (physically intact) while at
the garbage dump (tip) other day renewed the thought!
Ideas?

872. Re: Linear Amplifier Plans 1-16 Pill On DVD

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-06 23:16:36 UTC
From: "KD8IMG, Robert Trendel, is a twice convicted stalker of women." <mopeyzakween@yahoo.com>
Message-ID: <29c464d6-bafa-47f5-8aa4-cc7dad39045c@b14g2000yqd.googlegroups.com>
Source record: 2575
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On May 25, 10:26 pm, raypsi <RBorow...@gmail.com> wrote:
> On May 15, 5:00 pm, "Roger & Suzanne Nair" <r&sn...@lycos.com> wrote:
>
> > "KD8IMG, Robert Trendel, is a twice convicted stalker of
women."<mopeyzakw...@yahoo.com> wrote in message
>
> Hey OM
>
> He's got a heck of a tower if you looky at this street view
here:http://tinyurl.com/pw6fyl
> And a gr8t privacy fence.
>
> 73 OM
> de n8zu

moparholic is Roger Nair of Winter Brook Dr. in Brunswick,
Ohio...just
in case you did not know. He is the person posing as KC8QJP.

873. Re: Linear Amplifier Plans 1-16 Pill On DVD

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-06 23:16:53 UTC
From: "KD8IMG, Robert Trendel, is a twice convicted stalker of women." <mopeyzakween@yahoo.com>
Message-ID: <fb5071eb-4a7e-43d2-9487-b196aa11d0eb@b9g2000yqm.googlegroups.com>
Source record: 2576
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

```
On May 11, 2:13 pm, "kc8qjp" <cris...@hotmail.com> wrote:
> This is the DVD every CB or Ham Radio Operator has been looking for who
> likes to build their own Amplifiers.
>
> 1 to 16 Pill AMP Designs.....................
>
> http://cgi.ebay.com/Linear-Amplifier-Plans-1-16-Pill-On-DVD_W0QQitemZ...
>
>                   Description
>
>                        Item Specifics - Item Condition
>                                 Condition:  New
>
>                   This is the DVD every CB or Ham Radio Operator has been
> looking for who likes to build their own Amplifiers.
>
>                   1 to 16 Pill AMP Designs
>
>                   Step by Step directions
>
>                   Full Schematics
>
>                   Full Color Pics of step by step build of each Box 1-16
> pill
>
>                   Full Parts List for each Design
>
>                   And most important were to by all the parts you need is
> included.
>
>                   This DVD makes it very easy for the Novice to build their
> Own Box
>
>                   This is just plans we are not selling anything but plans
> on how to build these units and its for Educational Purpose only.
>
>                   No Returns or Money back.Each DVD is checked before they
> are shipped to make sure they work 100%
>
> begin 666 s.gif
> M1TE&.#EA`0`!`)'_`/___P```,# P ```"'Y! $```(`+ `````!``$```("
> $5 $`.P``
> `
```

> end

moparholic is Roger Nair of Winter Brook Dr. in Brunswick,
Ohio...just
in case you did not know. He is the person posing as KC8QJP.

874. Re: Use old microwave cabinets?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-07 02:28:35 UTC
From: Paul P <"REMOVE paul"@REMOVE>
Message-ID: <npy4m.1239$P5.754@nwrddc02.gnilink.net>
Source record: 2577

I can think of one use if the shields/seals are intact. As a prototype RF "silence" cage for testing noisy or low noise amps and such. Perhaps that Hash generating switching supply or bubble jet printer. The fan should help keep the gear cool.

What would a Steampunker do with one???
This for example:
http://forums.sketchucation.com/viewtopic.php?f=291&t=18097&p=149778

Paul P.

"terry" <tsanford@nf.sympatico.ca> wrote in message
news:b1038409-08d1-41f6-ab48-5b92cae0b5a6@c36g2000yqn.googlegroups.com...
> Has anyone had the idea of (or actually used) scrapped microwaves as
> equipment cabinets for home-brew projects?
> Seeing a nice small stainless steel one (physically intact) while at
> the garbage dump (tip) other day renewed the thought!
> Ideas?

875. Seeking New FAQ/Intro Maintainers for rec.radio.amateur.*

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-07 06:05:01 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/recruitment-1-1246946700@panix.com>
Source record: 2578
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/recruitment
Revision: 1.1 2007/09/29 18:42:47
Posting-Frequency: posted monthly
URL: http://www.faqs.org/faqs/radio/personal-intro/

Changes followed by "|".

The rec.radio.info newsgroup, first established in 1993, has been
recently revived by an active moderation team. We are currently seeking
suitable information, FAQ, and bulletin articles from the entire
rec.radio.* newsgroup hierarchy for simultaneous cross-posting to our
newsgroup.

We are seeking a replacement maintainer for the following information
bulletin formerly posted to rec.radio.amateur.* (and currently archived
at http://www.faqs.org/faqs/radio/personal-intro/ ):

radio/personal-intro
Subject: Guide to the rec.radio Newsgroups
Maintainer: jeffreyh@Hawaii.Edu (Jeffrey Herman)
Last Posted: 9 Nov 2001 06:18:17 GMT
Posting-Frequency: 15th of each month

We are willing to provide any technical support necessary to get this
article updated and automatically posted again at a regular interval.
This would include establishing contact with the original maintainer for
any necessary permissions. We would prefer to seek a new, dedicated
maintainer at this time, rather than start auto-posting the original
article ourselves.

For more information about our newsgroup, see:

http://www.panix.com/~rram/usenet/rri/index.html

Please direct any comments, questions, or criticisms to
rec-radio-info-request@panix.com.
```

876. Re: Use old microwave cabinets?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-07 07:21:45 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <omt5551aobcsghuuvi1ujj38gm2ovu0fd7@4ax.com>
Source record: 2579

On Tue, 07 Jul 2009 02:28:35 GMT, "Paul P" <REMOVE paul @ REMOVE
ppinyot . REMOVEcom> wrote:

>I can think of one use if the shields/seals are intact. As a prototype RF
>"silence" cage for testing noisy or low noise amps and such.

This may be of interest if you are building 13 cm equipment, but since
the seals are usually resonant traps tuned to 2450 MHz, the
attenuation on other frequencies can be quite low.

Paul OH3LWR

877. Re: ExpressPCB to Gerber file converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-07 11:22:00 UTC
From: Prashant <Prashant.4992986@radiobanter.com>
Message-ID: <Prashant.4992986@radiobanter.com>
Source record: 2580

Leland C. Scott;680414 Wrote:
> Does anybody have or know where to get a utility to convert from
> ExpressPCB
> file format to a standard Gerber file? If not any info on the file
> format
> itself?
>
>
> --
> Regards;
>
> Leland C. Scott
> KC8LDO
>
> "The most reliable components are
> the ones you leave out."
>
> By Gordon Bell, father of the
> minicomputer at DEC.

Hi !
you can save your files in form of PS.
Most PCB manufacturer accept this format also.
Or I can Offer you the service (Only $ 25).
It is also possible to convert PS file to gerber file this will solve
your problem.

--
Prashant

878. Re: Use old microwave cabinets?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-07 19:14:57 UTC
From: stan <tsanford@nf.sympatico.ca>
Message-ID: <5ff470e3-0131-4678-9fbd-246c9460fc68@n11g2000yqb.googlegroups.com>
Source record: 2581

On Jul 7, 5:21 am, Paul Keinanen <keina...@sci.fi> wrote:
> On Tue, 07 Jul 2009 02:28:35 GMT, "Paul P" <REMOVE paul @ REMOVE
>
> ppinyot . REMOVEcom> wrote:
> >I can think of one use if the shields/seals are intact. As a prototype RF
> >"silence" cage for testing noisy or low noise amps and such.
>
> This may be of interest if you are building 13 cm equipment, but since
> the seals are usually resonant traps tuned to 2450 MHz, the
> attenuation on other frequencies can be quite low.
>
> Paul OH3LWR

Paul: That's interesting 2450 megs being around 12.2 centimetres
wavelength????
I'd alway thought they were just some sort of RF seal along edges of
the case!
Never thought about that whie repairing several except to get the
seals correctly back in place.
Thanks for the comment.
However my original thought was that an old microwave; because
frequently dumped when they go wrong due to a) Cost of labour, skills
and tools are needed for repair, and b) New ones can be bought
cheaply; is a ready made cabinet for some home brew project?

879. Help need to identify some electronic parts.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-08 10:28:00 UTC
From: markus wolfgart <markus.wolfgart@dlr.de>
Message-ID: <7bjal0F235biiU1@mid.dfncis.de>
Source record: 2582

Dear YL's/XYL's and OM's, ;-)

could you give me some hints concerning the listed parts listed under my
url http://www.dl8mby.de/eparts/unknownparts.html or better show me a
link where to find a data sheet of them.

Many thanks in advance.

Markus
DL8MBY

880. Re: Help need to identify some electronic parts.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-08 15:10:55 UTC
From: JB <nospam@goofball.net>
Message-ID: <3G25m.30$N5.8@nwrddc01.gnilink.net>
Source record: 2583

All but the last appear to be oscillators modules. Part #3 is a 19.44 MHz.
All I can tell you beyond that is Google, Google, Google. I could tell you
more by the end of the day for $200.

881. Re: How do on-chip 90 degree phase shifters work?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-08 23:55:20 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <Jla5m.337199$jp1.216659@en-nntp-06.dc1.easynews.com>
Source record: 2584

Thanks Roger, Dong's paper there was quite useful.

882. Re: Help need to identify some electronic parts.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-09 07:26:35 UTC
From: markus wolfgart <markus.wolfgart@dlr.de>
Message-ID: <7blkcqF23kui1U1@mid.dfncis.de>
Source record: 2585

Dear JB,

I will give you some suitable answer concerning some of the mentioned
parts for free, due to the ham spirit ;-)

Part #1: Skyworks 2Gc PIN attenuator.
Part #2: ALPS VXCO (Freq. ?)
Part #3: Delta XCO 19.44Mc
Part #4: Corning VXCO 52Mc
Part #5: probably SAW filter from Temex
Part #6-8: are Filters

In general I know what these parts are, but would like to find some
data sheet when using them in later prrojects as i get not just one
but a big amount of them.

Markus
DL8MBY

JB schrieb:
> All but the last appear to be oscillators modules. Part #3 is a 19.44 MHz.
> All I can tell you beyond that is Google, Google, Google. I could tell you
> more by the end of the day for $200.
>
>
>

883. Re: Help need to identify some electronic parts.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-09 17:52:41 UTC
From: JB <nospam@goofball.net>
Message-ID: <J7q5m.240$N5.222@nwrddc01.gnilink.net>
Source record: 2586

"markus wolfgart" <markus.wolfgart@dlr.de> wrote in message
news:7blkcqF23kui1U1@mid.dfncis.de...
> Dear JB,
>
> I will give you some suitable answer concerning some of the mentioned
> parts for free, due to the ham spirit ;-)
>
> Part #1: Skyworks 2Gc PIN attenuator.
> Part #2: ALPS VXCO (Freq. ?)
> Part #3: Delta XCO 19.44Mc
> Part #4: Corning VXCO 52Mc
> Part #5: probably SAW filter from Temex
> Part #6-8: are Filters
>
> In general I know what these parts are, but would like to find some
> data sheet when using them in later prrojects as i get not just one
> but a big amount of them.
>
> Markus
> DL8MBY
>
>
>
> JB schrieb:
> > All but the last appear to be oscillators modules. Part #3 is a 19.44
MHz.
> > All I can tell you beyond that is Google, Google, Google. I could tell
you
> > more by the end of the day for $200.
> >
In the past when working on a synthesized data receiver module with a dead
Ref Osc, I spent several hours tracking down such data from various websites
in order to find a suitable replacement. Fortunately I had a customer to
pay for the time spent because going off the clock would have meant a loss
of earnings (and reduced tax contribution). Unfortunately, the company I
was contracted with retained the information (or not) and I was unable to
because of contract agreements.

The unit was mission critical in the automation of transportation and
handling of Mega-Tons of grain for import and export of food staples on a
massive scale and time was of the essence or the unit probably would have
been scrapped.

I have long noted the value of Ham Radio for dealing with many natural and
man made disasters, but the impact of economic disasters seems to have been

completely ignored and underestimated. Capitalism has forged a monetary system as a common means of exchange between parties with different skill sets and even of different and widely separated areas and locations. Without a common and mutually beneficial monetary system, we would not have gotten beyond the most basic of trade, instead relying on the hunter-gatherer model even for our water. Those who were able to grow food from their location could not trade very far away because of spoilage, and because it would take them away from tending the farm. Communism must resort to extreme intimidation in order to co-exist with GREED - a common human frailty throughout the World. Indeed, greed is so universal, that it inevitably becomes one of the ultimate motivations in any power struggle. Indeed the naive concept of Communism is impossible because it isn't sustainable, instead morphing into a form of authoritarian exploitation of the productive members of society as a robber class sharpens its skills at deriving support from the productive class, inevitably resulting in slavery of the productive.

An agreed upon world-wide and secure system of exchange is vital to any system of sharing goods, resources, expertise and knowledge. The collective threats against such a system tends to limit our ability to sustain a widespread and far-flung high standard of living. Although it doesn't guarantee that greed won't have a negative impact, we need to realize that greed isn't something that any system has been able rule out.

So Sir, in the spirit of Ham Radio, do it yourself and enjoy the thrill of your own accomplishment and self-reliance.

Jim

884. Re: Help need to identify some electronic parts.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-09 20:55:43 UTC
From: highlandham <rfburns@nospam.com>
Message-ID: <PNCdncBMh5vMxMvXnZ2dnUVZ8hCdnZ2d@pipex.net>
Source record: 2587

JB wrote:
> "markus wolfgart" <markus.wolfgart@dlr.de> wrote in message
> news:7blkcqF23kui1U1@mid.dfncis.de...
>> Dear JB,
>>
>> I will give you some suitable answer concerning some of the mentioned
>> parts for free, due to the ham spirit ;-)
>>
>> Part #1: Skyworks 2Gc PIN attenuator.
>> Part #2: ALPS VXCO (Freq. ?)
>> Part #3: Delta XCO 19.44Mc
>> Part #4: Corning VXCO 52Mc
>> Part #5: probably SAW filter from Temex
>> Part #6-8: are Filters
>>
>> In general I know what these parts are, but would like to find some
>> data sheet when using them in later prrojects as i get not just one
>> but a big amount of them.
>>
>> Markus
>> DL8MBY
>>
>>
>>
>> JB schrieb:
>>> All but the last appear to be oscillators modules. Part #3 is a 19.44
> MHz.
>>> All I can tell you beyond that is Google, Google, Google. I could tell
> you
>>> more by the end of the day for $200.
>>>
> In the past when working on a synthesized data receiver module with a dead
> Ref Osc, I spent several hours tracking down such data from various websites
> in order to find a suitable replacement. Fortunately I had a customer to
> pay for the time spent because going off the clock would have meant a loss
> of earnings (and reduced tax contribution). Unfortunately, the company I
> was contracted with retained the information (or not) and I was unable to
> because of contract agreements.
>
> The unit was mission critical in the automation of transportation and
> handling of Mega-Tons of grain for import and export of food staples on a
> massive scale and time was of the essence or the unit probably would have
> been scrapped.
>

> I have long noted the value of Ham Radio for dealing with many natural and
> man made disasters, but the impact of economic disasters seems to have been
> completely ignored and underestimated. Capitalism has forged a monetary
> system as a common means of exchange between parties with different skill
> sets and even of different and widely separated areas and locations.
> Without a common and mutually beneficial monetary system, we would not have
> gotten beyond the most basic of trade, instead relying on the
> hunter-gatherer model even for our water. Those who were able to grow food
> from their location could not trade very far away because of spoilage, and
> because it would take them away from tending the farm. Communism must
> resort to extreme intimidation in order to co-exist with GREED - a common
> human frailty throughout the World. Indeed, greed is so universal, that it
> inevitably becomes one of the ultimate motivations in any power struggle.
> Indeed the naive concept of Communism is impossible because it isn't
> sustainable, instead morphing into a form of authoritarian exploitation of
> the productive members of society as a robber class sharpens its skills at
> deriving support from the productive class, inevitably resulting in slavery
> of the productive.
>
> An agreed upon world-wide and secure system of exchange is vital to any
> system of sharing goods, resources, expertise and knowledge. The
> collective threats against such a system tends to limit our ability to
> sustain a widespread and far-flung high standard of living. Although it
> doesn't guarantee that greed won't have a negative impact, we need to
> realize that greed isn't something that any system has been able rule out.
>
> So Sir, in the spirit of Ham Radio, do it yourself and enjoy the thrill of
> your own accomplishment and self-reliance.
>
> Jim
>
==========
My reply to the above would be just :
1)Amen
2) Long live the 'real' spirit of Ham Radio

Frank GM0CSZ / KN6WH

885. Re: Help need to identify some electronic parts.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-10 08:33:30 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <d66d89ba-908c-48ab-b38c-5a9fe6786abd@k19g2000yqn.googlegroups.com>
Source record: 2588

On Jul 9, 4:55 pm, highlandham <rfbu...@nospam.com> wrote:
> JB wrote:
> > "markus wolfgart" <markus.wolfg...@dlr.de> wrote in message
> >news:7blkcqF23kui1U1@mid.dfncis.de...
> >> Dear JB,
>
> >> I will give you some suitable answer concerning some of the mentioned
> >> parts for free, due to the ham spirit ;-)
>
> >> Part #1: Skyworks 2Gc PIN attenuator.
> >> Part #2: ALPS VXCO (Freq. ?)
> >> Part #3: Delta XCO 19.44Mc
> >> Part #4: Corning VXCO 52Mc
> >> Part #5: probably SAW filter from Temex
> >> Part #6-8: are Filters
>
> >> In general I know what these parts are, but would like to find some
> >> data sheet when using them in later prrojects as i get not just one
> >> but a big amount of them.
>
> >> Markus
> >> DL8MBY
>
> >> JB schrieb:
> >>> All but the last appear to be oscillators modules. Part #3 is a 19.44
> > MHz.
> >>> All I can tell you beyond that is Google, Google, Google. I could tell
> > you
> >>> more by the end of the day for $200.
>
> > In the past when working on a synthesized data receiver module with a dead
> > Ref Osc, I spent several hours tracking down such data from various websites
> > in order to find a suitable replacement. Fortunately I had a customer to
> > pay for the time spent because going off the clock would have meant a loss
> > of earnings (and reduced tax contribution). Unfortunately, the company I
> > was contracted with retained the information (or not) and I was unable to
> > because of contract agreements.
>
> > The unit was mission critical in the automation of transportation and
> > handling of Mega-Tons of grain for import and export of food staples on a
> > massive scale and time was of the essence or the unit probably would have
> > been scrapped.
>
> > I have long noted the value of Ham Radio for dealing with many natural and

> > man made disasters, but the impact of economic disasters seems to have been
> > completely ignored and underestimated. Capitalism has forged a monetary
> > system as a common means of exchange between parties with different skill
> > sets and even of different and widely separated areas and locations.
> > Without a common and mutually beneficial monetary system, we would not have
> > gotten beyond the most basic of trade, instead relying on the
> > hunter-gatherer model even for our water. Those who were able to grow food
> > from their location could not trade very far away because of spoilage, and
> > because it would take them away from tending the farm. Communism must
> > resort to extreme intimidation in order to co-exist with GREED - a common
> > human frailty throughout the World. Indeed, greed is so universal, that it
> > inevitably becomes one of the ultimate motivations in any power struggle.
> > Indeed the naive concept of Communism is impossible because it isn't
> > sustainable, instead morphing into a form of authoritarian exploitation of
> > the productive members of society as a robber class sharpens its skills at
> > deriving support from the productive class, inevitably resulting in slavery
> > of the productive.
>
> > An agreed upon world-wide and secure system of exchange is vital to any
> > system of sharing goods, resources, expertise and knowledge.   The
> > collective threats against such a system tends to limit our ability to
> > sustain a widespread and far-flung high standard of living. Although it
> > doesn't guarantee that greed won't have a negative impact, we need to
> > realize that greed isn't something that any system has been able rule out.
>
> > So Sir, in the spirit of Ham Radio, do it yourself and enjoy the thrill of
> > your own accomplishment and self-reliance.
>
> > Jim
>
> ==
> My reply to the above would be just :
> 1)Amen
> 2) Long live the 'real' spirit of Ham Radio
>
> Frank GM0CSZ / KN6WH

Hey OM:

Nothing like agreeing with somebody that wants $200, then gives us a
lecture on the fine points of the worlds greatest style of gubermint:
communism.
I like trolls they live under the bridge just like me. And trolls
abound everywhere because there's lots of people that like them.
Long live the Queen and her trolls.

Looks like markus gots a load of parts from a cordless phone
manufacturer. Likely they are cordless phones that were made in a
former communist country.

73 OM
de n8zu

886. Re: Help need to identify some electronic parts.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-10 11:13:09 UTC
From: markus wolfgart <markus.wolfgart@dlr.de>
Message-ID: <7bom1kF246k50U1@mid.dfncis.de>
Source record: 2589

Hi Raypsi, ;-)

you are quite right, I got a black box of parts for cheap.
I had separate all the Analag Device beauties from the rest
and looking for data of the remain.

Thanks a lot for halp conversation and entertainment ;-)

Bye
Markus

DL8MBY

raypsi schrieb:
> On Jul 9, 4:55 pm, highlandham <rfbu...@nospam.com> wrote:
>> JB wrote:
>>> "markus wolfgart" <markus.wolfg...@dlr.de> wrote in message
>>> news:7blkcqF23kui1U1@mid.dfncis.de...
>>>> Dear JB,
>>>> I will give you some suitable answer concerning some of the mentioned
>>>> parts for free, due to the ham spirit ;-)
>>>> Part #1: Skyworks 2Gc PIN attenuator.
>>>> Part #2: ALPS VXCO (Freq. ?)
>>>> Part #3: Delta XCO 19.44Mc
>>>> Part #4: Corning VXCO 52Mc
>>>> Part #5: probably SAW filter from Temex
>>>> Part #6-8: are Filters
>>>> In general I know what these parts are, but would like to find some
>>>> data sheet when using them in later prrojects as i get not just one
>>>> but a big amount of them.
>>>> Markus
>>>> DL8MBY
>>>> JB schrieb:
>>>>> All but the last appear to be oscillators modules. Part #3 is a 19..44
>>> MHz.
>>>>> All I can tell you beyond that is Google, Google, Google. I could tell
>>> you
>>>>> more by the end of the day for $200.
>>> In the past when working on a synthesized data receiver module with a dead
>>> Ref Osc, I spent several hours tracking down such data from various websites
>>> in order to find a suitable replacement. Fortunately I had a customer to
>>> pay for the time spent because going off the clock would have meant a loss
>>> of earnings (and reduced tax contribution). Unfortunately, the company I
>>> was contracted with retained the information (or not) and I was unable to
>>> because of contract agreements.
>>> The unit was mission critical in the automation of transportation and

>>> handling of Mega-Tons of grain for import and export of food staples on a
>>> massive scale and time was of the essence or the unit probably would have
>>> been scrapped.
>>> I have long noted the value of Ham Radio for dealing with many natural and
>>> man made disasters, but the impact of economic disasters seems to have been
>>> completely ignored and underestimated. Capitalism has forged a monetary
>>> system as a common means of exchange between parties with different skill
>>> sets and even of different and widely separated areas and locations.
>>> Without a common and mutually beneficial monetary system, we would not have
>>> gotten beyond the most basic of trade, instead relying on the
>>> hunter-gatherer model even for our water. Those who were able to grow food
>>> from their location could not trade very far away because of spoilage, and
>>> because it would take them away from tending the farm. Communism must
>>> resort to extreme intimidation in order to co-exist with GREED - a common
>>> human frailty throughout the World. Indeed, greed is so universal, that it
>>> inevitably becomes one of the ultimate motivations in any power struggle.
>>> Indeed the naive concept of Communism is impossible because it isn't
>>> sustainable, instead morphing into a form of authoritarian exploitation of
>>> the productive members of society as a robber class sharpens its skills at
>>> deriving support from the productive class, inevitably resulting in slavery
>>> of the productive.
>>> An agreed upon world-wide and secure system of exchange is vital to any
>>> system of sharing goods, resources, expertise and knowledge. The
>>> collective threats against such a system tends to limit our ability to
>>> sustain a widespread and far-flung high standard of living. Although it
>>> doesn't guarantee that greed won't have a negative impact, we need to
>>> realize that greed isn't something that any system has been able rule out.
>>> So Sir, in the spirit of Ham Radio, do it yourself and enjoy the thrill of
>>> your own accomplishment and self-reliance.
>>> Jim
>> ==
>> My reply to the above would be just :
>> 1)Amen
>> 2) Long live the 'real' spirit of Ham Radio
>>
>> Frank GM0CSZ / KN6WH
>
> Hey OM:
>
> Nothing like agreeing with somebody that wants $200, then gives us a
> lecture on the fine points of the worlds greatest style of gubermint:
> communism.
> I like trolls they live under the bridge just like me. And trolls
> abound everywhere because there's lots of people that like them.
> Long live the Queen and her trolls.
>
> Looks like markus gots a load of parts from a cordless phone
> manufacturer. Likely they are cordless phones that were made in a
> former communist country.
>

> 73 OM
> de n8zu

887. Re: So I have all this old radio equipment...

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-11 07:37:12 UTC
From: "Roger (K8RI)" <validaddress@my.com>
Message-ID: <osfg55t841u9clpftcvcun7dmfcvfvurao@4ax.com>
Source record: 2590

On Wed, 17 Jun 2009 08:09:52 -0700 (PDT), Jake
<mechanicaljake@gmail.com> wrote:

>Hey all,
>
>Many years ago (Late 80's) I was given a variety of radio equipment
>from a gentleman I knew. He was going to new guinea as a missionary
>and gave me a bunch of parts/projects/stuff.
>
>I have identified one of the (transcievers?) as an ARC-5. Also there

I have absolutely no idea as to what they are going for now days.

ARC5's that we used to get for just a couple of bucks if not free are
now (in some areas sought after) There is a museum down in Texas that
is rebuilding old aircraft. They have the only flying B29 in the world
that I know of. Another might be the Experimental Aircraft Association
http://www.eaa.org/ They might know of some rebuilders interested and
give you a tax write off.

Of course there is always E-Bay. do a search on ARC-5 and see what
they are going for on there.

I have no idea as to how many of those I cut up for parts 30 or 40
years ago. I do know that the antique aircraft rebuilders are looking
for them.

73 and good luck,

>is at least 2 more of these in parts, maybe more. Also a bunch of
>variable capacitors (the air-core metal finned ones) and various tubes
>and coils and other random stuff.
>
>This stuff has been sitting in my attic for 20 years, slowly
>collecting dust and corrosion. A long time ago, I was going to get my
>general class license. I never took the test, and just don't have much
>hobby time anymore.

BTW, I wonder if your attic is close to mine (Midland Michigan)<:-))
>
>Does anyone know if this equipment is worth identifying and posting
>somewhere for sale/trade? And if so, where would I find people
>interested in this stuff?
>
>Thanks in advance :-D

888. Re: Uncle Ruport Is back in the news

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-11 17:18:59 UTC
From: Eugene <aeonscii@gmail.com>
Message-ID: <7dad5dc8-d44c-48f4-bcb6-fb1ecffbca83@t21g2000yqi.googlegroups.com>
Source record: 2591

We, The People: outspoken and disenchanted with conservative views
once again find the liberals back in the news. WAKE UP! ! ! The dreams
passed you bye. Another round for the Democrats?
>
> Uncle Ruport has been a schewd Sat Pirate. His many names were 2old
> 4this,dexter,squeem well he told me he had 8 guys keeping his 450
> pirate sites updated with new files! Nagravision was never hacked it
> was simply furnished by him to his pirate sat sites to make his goal
> of owning the satellite empire!
>
> He did so with finess ,after purchasing AT&T he put his oldest son in
> biz with AT&Tamp and sent him back to Australia,
> because of his religous convoctions!
> His yougest son Sir James was pulled out of law school at Harvard to
> fill the void and put in command of NDS.This gave Uncle Ruport free
> time to exploit the North American market.After becoming an American
> citizen Uncle Ruport was allowed to buy DTV.
> After Uncle Ruport dominated the Satellite biz he started to dabble
> in the internet of which he owns or has control of everything that
> goes on his World Wide Webb of deception including microsoft !!
>
> His pirate shops have came a long way from selling timed released
> files and cards to having a controling interest in FTA/DVB compatible
> STBs.
> His interest in Thompson Electronics and their ability to provide
> hardware to suit his fancy was merely the tip of the iceburg.He
> phased the DTV hack out of biz and blamed it on a change in their
> encryption..This was not reality just technobabble.
>
> Nagravision has never changed to NAG 2 nor
> NAG3 because the encrytion was never a danger to satellite PTV. After
> buying and selling DTV to John Malone there was a binding agreement
> not to release DTV/DSS files or else he would have to pay dearly.His
> plea agreement with Canal Plus has given John Malone the upper hand.
> The pirates dont know what went on they just swallowed the new
> encryption farse!
>
> Now Uncle Ruport is full speed ahead now with pushing IKS /DVB
> boxes .However he has to phase out his so called NAG2..Which is
> nothing more than dissabling the ppv channels in his files and
> blaming it on the new NAG 3 farse.
> During this dissabling of channels on the current STBs and still
> offering them on his IKS connection has sent the pirates into a
> buying freenzy.

> His IKS is florishing out of control$$$ He has gone as for as to
> delete the old files ,back when all the channels were included.So
> smart people wont realize how he is pushing his IKS connection.
> However there is a few that has realized what he was up to and has a
> stache of old files to fall back on!
>
> and the show goes on
>
> Wheres My $5mil UNK ?

889. Re: Help need to identify some electronic parts.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-12 15:34:47 UTC
From: JB <nospam@goofball.net>
Message-ID: <ron6m.789$N5.403@nwrddc01.gnilink.net>
Source record: 2592

"raypsi" <RBorowiak@gmail.com> wrote in message
news:d66d89ba-908c-48ab-b38c-5a9fe6786abd@k19g2000yqn.googlegroups.com...
On Jul 9, 4:55 pm, highlandham <rfbu...@nospam.com> wrote:
> JB wrote:
> > "markus wolfgart" <markus.wolfg...@dlr.de> wrote in message
> >news:7blkcqF23kui1U1@mid.dfncis.de...
> >> Dear JB,
>
> >> I will give you some suitable answer concerning some of the mentioned
> >> parts for free, due to the ham spirit ;-)
>
> >> Part #1: Skyworks 2Gc PIN attenuator.
> >> Part #2: ALPS VXCO (Freq. ?)
> >> Part #3: Delta XCO 19.44Mc
> >> Part #4: Corning VXCO 52Mc
> >> Part #5: probably SAW filter from Temex
> >> Part #6-8: are Filters
>
> >> In general I know what these parts are, but would like to find some
> >> data sheet when using them in later prrojects as i get not just one
> >> but a big amount of them.
>
> >> Markus
> >> DL8MBY
>
> >> JB schrieb:
> >>> All but the last appear to be oscillators modules. Part #3 is a 19.44
> > MHz.
> >>> All I can tell you beyond that is Google, Google, Google. I could tell
> > you
> >>> more by the end of the day for $200.
>
> > In the past when working on a synthesized data receiver module with a
dead
> > Ref Osc, I spent several hours tracking down such data from various
websites
> > in order to find a suitable replacement. Fortunately I had a customer to
> > pay for the time spent because going off the clock would have meant a
loss
> > of earnings (and reduced tax contribution). Unfortunately, the company I
> > was contracted with retained the information (or not) and I was unable
to
> > because of contract agreements.
>

> > The unit was mission critical in the automation of transportation and
> > handling of Mega-Tons of grain for import and export of food staples on
a
> > massive scale and time was of the essence or the unit probably would
have
> > been scrapped.
>
> > I have long noted the value of Ham Radio for dealing with many natural
and
> > man made disasters, but the impact of economic disasters seems to have
been
> > completely ignored and underestimated. Capitalism has forged a monetary
> > system as a common means of exchange between parties with different
skill
> > sets and even of different and widely separated areas and locations.
> > Without a common and mutually beneficial monetary system, we would not
have
> > gotten beyond the most basic of trade, instead relying on the
> > hunter-gatherer model even for our water. Those who were able to grow
food
> > from their location could not trade very far away because of spoilage,
and
> > because it would take them away from tending the farm. Communism must
> > resort to extreme intimidation in order to co-exist with GREED - a
common
> > human frailty throughout the World. Indeed, greed is so universal, that
it
> > inevitably becomes one of the ultimate motivations in any power
struggle.
> > Indeed the naive concept of Communism is impossible because it isn't
> > sustainable, instead morphing into a form of authoritarian exploitation
of
> > the productive members of society as a robber class sharpens its skills
at
> > deriving support from the productive class, inevitably resulting in
slavery
> > of the productive.
>
> > An agreed upon world-wide and secure system of exchange is vital to any
> > system of sharing goods, resources, expertise and knowledge. The
> > collective threats against such a system tends to limit our ability to
> > sustain a widespread and far-flung high standard of living. Although it
> > doesn't guarantee that greed won't have a negative impact, we need to
> > realize that greed isn't something that any system has been able rule
out.
>
> > So Sir, in the spirit of Ham Radio, do it yourself and enjoy the thrill
of
> > your own accomplishment and self-reliance.
>

> > Jim
>
> ======================================
> My reply to the above would be just :
> 1)Amen
> 2) Long live the 'real' spirit of Ham Radio
>
> Frank GM0CSZ / KN6WH

Hey OM:

Nothing like agreeing with somebody that wants $200, then gives us a lecture on the fine points of the worlds greatest style of gubermint: communism.
I like trolls they live under the bridge just like me. And trolls abound everywhere because there's lots of people that like them.
Long live the Queen and her trolls.

Looks like markus gots a load of parts from a cordless phone manufacturer. Likely they are cordless phones that were made in a former communist country.

73 OM
de n8zu

Unfortunately, outside of a small group of experimenters these parts are pretty much worthless. It is difficult enough to market finished products that consumers will shell out for. Very few will decide to conceive of, design and build a useful finished product based on a randomly acquired handful of parts. I actually stopped charging for repair parts so that I won't have to spend so much time and grievous effort into accounting and reporting for a resale license. I simply bid for Labor.

My advice would be to cut and paste specifications and part description and application summary into a text file and put them up on a website and submit them to a search engine for anyone that might be interested. I have noticed that some forums are regularly googled.

We could probably dispense with using the word "communist" because it is just a word. Lets just realize that greed for free stuff can lure us into slavery, because there are people who would make promises to lure the gullible into slavery.

With all the talk these days of "stimulus", it is my bet that most of the money went to buying votes and pet projects that will have no positive effect on economic recovery. It reminds me of Pharaoh contracting obelisks and monuments so that peoples attention will be diverted from building their own businesses, while Pharaoh consolidates his power through building the empire. The slaves will work and be happy for a time, and when the projects reach their fruitless conclusion they will have to look for work again. In my book this is exploitation. Didn't we learn anything from the "New Deal"?

890. DIY/COTS PTO drive - ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-12 20:46:46 UTC
From: spamhog <n1jpr@hotmail.com>
Message-ID: <d5d7c235-ee07-43f3-9fcf-a222712ad5d1@q35g2000vbi.googlegroups.com>
Source record: 2593

I'm looking for ideas for sliding a ~2" ferrite core in and out of a coil. I've seen ways of tuning over a small range by means of a brass screw used as core. I need smtg better than that, with repeatable positioning and smooth movement.

Some ideas:

- micrometric screw:
use a preexisting screw taken from old depth gauge or bought standalone
PRO calibrated, demoltiplicated, high resolution position readout
CON expensive if new, still need to invent a way to fasten ferrite core to spindle, screw protudes.

- screw drive from scratch:
PRO can be taylored, can use knob with 360deg scale, turns determined by screw pitch - say 0-100 over 360deg @ 20 turns/inch produces 8,000 divisions over 2" linear displacement (if with vernier reaches 80,000), may use knob with turns counter
CON quite complicated to design, may reguire machining and searching for pieces.

- wire drive, like in old radios
PRO can reuse hardware like in old radio, if scale is linear-motion the tuning indicator is directly attached to ferrite plunger
CON may suffer backlash, hardware disappearing, very short scale.

I only saw very rough solutions, such as gravity pulled ferrite in vertical coil, or using brass screw directly as core for small band coverage. No idea if there's some promising and available type of surplus drive.

Any ideas? Any plans anywhere for DIY? Kits???

(again, I _did_ see use of a small brass screw w/o ferrite!).

R & TIA

Filippo N1JPR

891. Re: Transceiver mod

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-12 23:08:13 UTC
From: Eugene <aeonscii@gmail.com>
Message-ID: <87ec74a1-3087-4537-a6d6-ea85ee5cb3ce@y10g2000prf.googlegroups.com>
Source record: 2594

Here's using your head! 1KWH required for licensing within two miles
of an airport??? Within the US amateurs experiment.

On May 31, 11:20 am, Scott <acepilotREM...@bloomer.net> wrote:
> raypsi wrote:
> > Like checking the swimming pool to see if there is water in it
> >> first.
>
> > Hey OM:
>
> > My swimming pool is Lake Erie, be a long time for it to dry out.
>
> > 73 OM
> > de n8zu
>
> Isn't that like swimming in a cesspool? Isn't that the most polluted of
> the Great Lakes? I live near Lake Superior...water looks clean but it's
> damn cold (but the icebergs do give you a nice place to get out and rest
> on the swim from Ashland (WI) to Thunder Bay, Ontario) ;)
>
> Scott
> N0EDV

892. Re: Use old microwave cabinets?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-13 03:02:00 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <a1a44135-52b0-4259-a689-985344563922@f30g2000vbf.googlegroups.com>
Source record: 2595

Hey OM:

Microwave ovens are built for a price, the cheaper the better. The chinesse have alot of crap out there. Even the fans are junk. I mean who uses a shaded pole syncro motor for a fan these days, power hungry junk. Best you could get out of a microwave oven is the metal cabinet can be cut up with scissors, that's right, dollar store scissors, will cut the sheet metal they use on microwave ovens. And with a good brake you can make a lot of project boxes.

Well stainless steel project boxes would look sweet.

73 OM
de n8zu

893. Anybody want Swan SWR-1A faceplate or internal workings?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-13 16:40:58 UTC
From: "Myron A. Calhoun" <mcalhoun@freeshell.org>
Message-ID: <h3fo2q$332$1@chessie.cirr.com>
Source record: 2596
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

Crossposted to rec.radio.amateur.homebrew, rec.radio.amateur.antenna, and rec.radio.amateur.boatanchors

I wanted a dual-meter voltmeter to mount atop an LDG battery booster to continuously indicate input and output voltages, so I rebuilt an old SWAN Electronics SWR-1A meter and now have the faceplate and the internal SWR sensor unit left over.

I'll mail (without charge in the USA) the faceplate to the first person who wants to restore hizer scratched-up SWR-1A faceplate.

Although it weighs less than five ounces, the sensor unit is obviously a bit bulkier (about 5" x 2" x 1.5") than the flat faceplate!-) It includes two integrally-mounted SO-239 connectors, two diodes, two resistors, two capacitors, the dual pot and its knob, and the really-sturdy sensor (but NOT the two 100 microamp meters which I used in my project!-), all connected as they were in the original unit. If someone wants it, it should mail well and shouldn't take too much postage.

--73, W0PBV at ARRL dot net

894. Re: DIY/COTS PTO drive - ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-13 18:09:49 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <9dc707f6-5b0a-4c7c-a7e4-00a451191efd@f30g2000vbf.googlegroups.com>
Source record: 2597

Hey OM:

Brass is the old way to lower inductance. I like to use bismuth the best metal for lowering inductance of a coil. There's no way that a low power signal can cut thru bismuth.
And you can increase range by using tapered cone shaped slugs, and centripetal casting is a lead pipe cinch with bismuth that melts at 271 degrees C.

I got a hold of sum 10 gram bismuth cylindrical slugs for like a buck a piece. Really sweet for PTO and RF front ends. Depending on the size of coil you have to match the right N150 to N750 capacitor, to compensate for inductive temp drift. Or stick it in a small temp controlled oven.
Or the new age method use AFC or PLL to catch the drift.

73 OM
de n8zu

895. Re: DIY/COTS PTO drive - ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-13 19:32:09 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <8de4eb79-f749-4399-ba29-12e90f332e1b@l5g2000vbp.googlegroups.com>
Source record: 2598

On Jul 12, 4:46 pm, spamhog <n1...@hotmail.com> wrote:
> I'm looking for ideas for sliding a ~2" ferrite core in and out of a
> coil. I've seen ways of tuning over a small range by means of a brass
> screw used as core. I need smtg better than that, with repeatable
> positioning and smooth movement.
>
> Some ideas:
>
> - micrometric screw:
> use a preexisting screw taken from old depth gauge or bought
> standalone
> PRO calibrated, demoltiplicated, high resolution position readout
> CON expensive if new, still need to invent a way to fasten ferrite
> core to spindle, screw protudes.
>
> - screw drive from scratch:
> PRO can be taylored, can use knob with 360deg scale, turns determined
> by screw pitch - say 0-100 over 360deg @ 20 turns/inch produces 8,000
> divisions over 2" linear displacement (if with vernier reaches
> 80,000), may use knob with turns counter
> CON quite complicated to design, may reguire machining and searching
> for pieces.

Something that I thought always looked promising - but which I've never used in a PTO - are the old floppy drives that used a Acme-style gear rod driven by a stepper motor to slide the head back and forth across the floppies. Most 8" floppy drives meet this description, but only a few 5" floppies did (most 5" floppy drives use a steel band to do the positioning).

The floppy head assembly had a set of nuts with some anti-backlash springs. I would think that many of the parts would be quite useful for a homebrew PTO drive.

Don't knock the "good enough" approach. The crude brass-rod-screw-and-a-few-brass-nuts scheme used by KD1JV and others for a VFO is really very usable, especially if you put a big 2" tuning knob on it, but for portable use a smaller knob works without quite the smooth feeling. It's not something that will let you cover a 0.5MHz band linearly, but it will give you very nice coverage of for example a CW-subband.

Tim.

896. Re: DIY/COTS PTO drive - ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-15 14:09:39 UTC
From: spamhog <n1jpr@hotmail.com>
Message-ID: <f4b3adea-df5b-4cca-aa50-8454c41214bb@o6g2000yqj.googlegroups.com>
Source record: 2599

Thank you all around!

I need to make an update.

If one keeps the slug travel requirement to 1" (which isn't bad at all, even for a broad-range PTO) and is willing to use an "outside" micrometer (for thickness/diameter) it's a different game: micrometric screws become really cheap! Bear in mind that repositioning trumps absolute precision, so cheap isn't perforce bad. You can get a 0-1" micrometer for well under $10, i.e. generally cheaper than depth micrometers and in the ballpark for axial slow motion drives with scales.

You can't directly drill holes in the base for front panel mounting, as you can do in depth gauges, but the arch that positions the reference surface opposite to the screw can be cut / drilled and used for securing the device internally. Many models have screw-fastened plastic grips and may not need drilling. Also, by securing it well inside the front panel, the protrusion of the screw can be reduced.

On ebay, this search produces drossfree results:
outside micrometer -electronic -digital -laser -stage -depth -internal -bore -torque -caliper -lea* -marking

I'll experiment with supergluing a bit of ferrite to a micrometric screw tip with a bit of acrylic dowel in between.

On Jul 12, 8:46 pm, spamhog <n1...@hotmail.com> wrote:

> - micrometric screw:
> use a preexisting screw taken from old depth gauge or bought
> standalone
> PRO calibrated, demoltiplicated, high resolution position readout
> CON expensive if new, still need to invent a way to fasten ferrite
> core to spindle, screw protudes.

897. Re: Use old microwave cabinets?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-16 02:52:48 UTC
From: stan <tsanford@nf.sympatico.ca>
Message-ID: <7bae619a-1f0a-4975-b139-3ef106070062@j12g2000vbl.googlegroups.com>
Source record: 2600

On Jul 13, 1:02 am, raypsi <RBorow...@gmail.com> wrote:
> Hey OM:
>
> Microwave ovens are built for a price, the cheaper the better. The
> Chinese have a lot of crap out there. Even the fans are junk. I mean
> who uses a shaded pole syncro motor for a fan these days, power hungry
> junk. Best you could get out of a microwave oven is the metal cabinet
> can be cut up with scissors, that's right, dollar store scissors, will
> cut the sheet metal they use on microwave ovens. And with a good brake
> you can make a lot of project boxes.
>
> Well stainless steel project boxes would look sweet.
>
> 73 OM
> de n8zu

Yup somebody gave me a stainless four section container which appears
to be unused and from an old fashioned ice-cream parlour/soda
fountain. There is also a single container, same depth and height etc.
And there is a nice rim around the open ends to which a front panel
could fastened!
Immediately thought of ready-made small equipment cabinets!
Scrapping a bunch of old microwaves is what raised the question of a
reuse for the cabinets. We had a school cafeteria operation one time
with three or four m.waves in use for short periods, on several
occasions was able to scrap older ones for parts for repairs. Now just
junk lying around!

898. Crystals needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-17 12:41:33 UTC
From: Newsreader <Newsreader@uk.radio.amateur>
Message-ID: <1k_7m.16120$xB.9768@newsfe10.ams2>
Source record: 2501

Does anyone have any 10X, FT243 or HC6/U style crystals on these
frequencies?
3.560, 10.100, 10.116, 10.140 (all in MHz)
Any help would be appreciated - willing to pay costs.

899. Re: Crystals needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-17 14:48:27 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <roydnf6Va7OmEv3XnZ2dnUVZ_hti4p2d@web-ster.com>
Source record: 2502

On Fri, 17 Jul 2009 13:41:33 +0100, Newsreader wrote:

> Does anyone have any 10X, FT243 or HC6/U style crystals on these
> frequencies?
> 3.560, 10.100, 10.116, 10.140 (all in MHz) Any help would be appreciated
> - willing to pay costs.

AFAIK Jan and Fox both still make HC6/U crystals to whatever frequency
you want.

There are ads in QST for crystals in FT243 holders, although I'd be leery
of quality until I'd had some mileage with a particular vendor.

So if you don't mind new (and new prices) you can get what you want.

--
www.wescottdesign.com

900. Re: Use old microwave cabinets?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-18 19:49:27 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <9c576709-cdd3-4c59-8753-a352aabab1e6@26g2000yqk.googlegroups.com>
Source record: 2503

On Jul 15, 10:52 pm, stan <tsanf...@nf.sympatico.ca> wrote:
> On Jul 13, 1:02 am, raypsi <RBorow...@gmail.com> wrote:
>
> > Hey OM:
>
> > Microwave ovens are built for a price, the cheaper the better. The
> > Chinese have a lot of crap out there. Even the fans are junk. I mean
> > who uses a shaded pole syncro motor for a fan these days, power hungry
> > junk. Best you could get out of a microwave oven is the metal cabinet
> > can be cut up with scissors, that's right, dollar store scissors, will
> > cut the sheet metal they use on microwave ovens. And with a good brake
> > you can make a lot of project boxes.
>
> > Well stainless steel project boxes would look sweet.
>
> > 73 OM
> > de n8zu
>
> Yup somebody gave me a stainless four section container which appears
> to be unused and from an old fashioned ice-cream parlour/soda
> fountain. There is also a single container, same depth and height etc.
> And there is a nice rim around the open ends to which a front panel
> could fastened!
> Immediately thought of ready-made small equipment cabinets!
> Scrapping a bunch of old microwaves is what raised the question of a
> reuse for the cabinets. We had a school cafeteria operation one time
> with three or four m.waves in use for short periods, on several
> occasions was able to scrap older ones for parts for repairs. Now just
> junk lying around!

I saw one at a hamfest in the tailgate section someone was trying to
sell that was turned into a HV power supply and it used a pair of
microwave oven transformers.

Jimmie

901. Re: Use old microwave cabinets?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-18 20:57:13 UTC
From: brian whatcott <betwys1@sbcglobal.net>
Message-ID: <ndmdnaUdXOPZqv_XnZ2dnUVZ_jqdnZ2d@giganews.com>
Source record: 2504

JIMMIE wrote:
> On Jul 15, 10:52 pm, stan <tsanf...@nf.sympatico.ca> wrote:
>> On Jul 13, 1:02 am, raypsi <RBorow...@gmail.com> wrote:
>>
>>> Hey OM:
>>> Microwave ovens are built for a price, the cheaper the better. The
>>> Chinese have a lot of crap out there. Even the fans are junk. I mean
>>> who uses a shaded pole syncro motor for a fan these days, power hungry
>>> junk. Best you could get out of a microwave oven is the metal cabinet
>>> can be cut up with scissors, that's right, dollar store scissors, will
>>> cut the sheet metal they use on microwave ovens. And with a good brake
>>> you can make a lot of project boxes.
>>> Well stainless steel project boxes would look sweet.
>>> 73 OM
>>> de n8zu
>> Yup somebody gave me a stainless four section container which appears
>> to be unused and from an old fashioned ice-cream parlour/soda
>> fountain. There is also a single container, same depth and height etc.
>> And there is a nice rim around the open ends to which a front panel
>> could fastened!
>> Immediately thought of ready-made small equipment cabinets!
>> Scrapping a bunch of old microwaves is what raised the question of a
>> reuse for the cabinets. We had a school cafeteria operation one time
>> with three or four m.waves in use for short periods, on several
>> occasions was able to scrap older ones for parts for repairs. Now just
>> junk lying around!
>
> I saw one at a hamfest in the tailgate section someone was trying to
> sell that was turned into a HV power supply and it used a pair of
> microwave oven transformers.
>
> Jimmie

Instead of the 1 KV power supply at 1 Amp, there's the possibility of
bandsawing off the high voltage winding all together, and winding on 5
or 6 turns of welding cable. This makes a useful spot welder for
stainless steel sheet, which material performs specially well with spot
welds.
The power is low end so its important to choose a microwave rated at
least 1100 watts for this makeover.

Brian W

902. Re: Use old microwave cabinets?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-21 23:36:10 UTC
From: stan <tsanford@nf.sympatico.ca>
Message-ID: <a10cb9c5-adff-46bb-b71d-9d38ad995965@z34g2000vbl.googlegroups.com>
Source record: 2505

On Jul 18, 6:57 pm, brian whatcott <betw...@sbcglobal.net> wrote:
> JIMMIE wrote:
> > On Jul 15, 10:52 pm, stan <tsanf...@nf.sympatico.ca> wrote:
> >> On Jul 13, 1:02 am, raypsi <RBorow...@gmail.com> wrote:
>
> >>> Hey OM:
> >>> Microwave ovens are built for a price, the cheaper the better. The
> >>> Chinese have a lot of crap out there. Even the fans are junk. I mean
> >>> who uses a shaded pole syncro motor for a fan these days, power hungry
> >>> junk. Best you could get out of a microwave oven is the metal cabinet
> >>> can be cut up with scissors, that's right, dollar store scissors, will
> >>> cut the sheet metal they use on microwave ovens. And with a good brake
> >>> you can make a lot of project boxes.
> >>> Well stainless steel project boxes would look sweet.
> >>> 73 OM
> >>> de n8zu
> >> Yup somebody gave me a stainless four section container which appears
> >> to be unused and from an old fashioned ice-cream parlour/soda
> >> fountain. There is also a single container, same depth and height etc.
> >> And there is a nice rim around the open ends to which a front panel
> >> could fastened!
> >> Immediately thought of ready-made small equipment cabinets!
> >> Scrapping a bunch of old microwaves is what raised the question of a
> >> reuse for the cabinets. We had a school cafeteria operation one time
> >> with three or four m.waves in use for short periods, on several
> >> occasions was able to scrap older ones for parts for repairs. Now just
> >> junk lying around!
>
> > I saw one at a hamfest in the tailgate section someone was trying to
> > sell that was turned into a HV power supply and it used a pair of
> > microwave oven transformers.
>
> > Jimmie
>
> Instead of the 1 KV power supply at 1 Amp, there's the possibility of
> bandsawing off the high voltage winding all together, and winding on 5
> or 6 turns of welding cable.   This makes a useful spot welder for
> stainless steel sheet, which material performs specially well with spot
> welds.
> The power is low end so its important to choose a microwave rated at
> least 1100 watts for this makeover.
>
> Brian W- Hide quoted text -
>

> - Show quoted text -

Same technique (cutting off HV winding and putting a few turns to make a battery charger transformer was also mentioned.
And previously had mentioned that HV winding to 115 volt mains winding was a turns/voltage ratio of approx 20:1.
Hence an impedance matching ratio of 400 to one! Might be good enough to match an 8 ohm speaker load into say a triode connected power tube? 400 x 8 = 3200? Haven't tried it! Just rambling around. Hate to throw stuff away.

903. Did anybody use the Si4735 quasi-SDR-SOC in a HB receiver?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-22 18:02:25 UTC
From: spamhog <n1jpr@hotmail.com>
Message-ID: <44308f14-f0a5-4dd3-a631-37ea880b76fb@c1g2000yqi.googlegroups.com>
Source record: 2506

"The Si473x, Si474x and Si4707 devices are the industry's first fully integrated, 100% CMOS AM/FM/SW/LW and WB radio receiver ICs. Offering unmatched integration and PCB space savings, the Si47xx only requires two external components and less than 15 mm² of board area excluding the antenna inputs."

In chippic language, this thing has PGA, DSP, ADC, DAC. While there's a PGA block that seems non-FP, the DSP is upgradeable - hence reconfigurable, although I bet the code is closed and well guarded.

In radio language it implements 2x AGCed LNA, 4x balanced mixer, 2x I/Q detectors, DSP demodulation, RDS/RMBS, both digital and analog audio out (stereo of course).

https://www.silabs.com/products/audiovideo/amfmreceivers/Pages/default.aspx

https://www.silabs.com/products/audiovideo/amfmreceivers/Pages/Si473435.aspx

The application notes document for antenna selection and layout is not to be found on the Silicon Labs website, is still under NDA but a version for a shortwaveless version has leaked from Russia.
http://delanet.ru/images/stories/pdf/AN383_si4711.pdf

Several chips in the that family have transmit capabilities too, complete with varicap antenna tuner.

A quasi-SDR-SOC, taking up less room than a small knob.

904. Re: Did anybody use the Si4735 quasi-SDR-SOC in a HB receiver?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-22 18:14:09 UTC
From: mikea <mikea@mikea.ath.cx>
Message-ID: <hg1kj6-23h.ln1@mikea.ath.cx>
Source record: 2507

spamhog <n1jpr@hotmail.com> wrote in
<44308f14-f0a5-4dd3-a631-37ea880b76fb@c1g2000yqi.googlegroups.com>:
> "The Si473x, Si474x and Si4707 devices are the industry's first fully
> integrated, 100% CMOS AM/FM/SW/LW and WB radio receiver ICs. Offering
> unmatched integration and PCB space savings, the Si47xx only requires
> two external components and less than 15 mm? of board area excluding
> the antenna inputs."
>
> In chippic language, this thing has PGA, DSP, ADC, DAC. While there's
> a PGA block that seems non-FP, the DSP is upgradeable - hence
> reconfigurable, although I bet the code is closed and well guarded.
>
> In radio language it implements 2x AGCed LNA, 4x balanced mixer, 2x I/
> Q detectors, DSP demodulation, RDS/RMBS, both digital and analog audio
> out (stereo of course).
>
> https://www.silabs.com/products/audiovideo/amfmreceivers/Pages/default.aspx
>
> https://www.silabs.com/products/audiovideo/amfmreceivers/Pages/Si473435.aspx
>
> The application notes document for antenna selection and layout is not
> to be found on the Silicon Labs website, is still under NDA but a
> version for a shortwaveless version has leaked from Russia.
> http://delanet.ru/images/stories/pdf/AN383_si4711.pdf
>
> Several chips in the that family have transmit capabilities too,
> complete with varicap antenna tuner.
>
> A quasi-SDR-SOC, taking up less room than a small knob.

Drooooooolworthy!

--
" ... a language is just an dialect with an army and a navy."
-- written by someone very perceptive,
used by Paul Tomblin in a.s.r.

905. WTB QEX Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-22 19:09:09 UTC
From: amdx <amdx@knology.net>
Message-ID: <2b999$4a6763d5$d8baf330$794@KNOLOGY.NET>
Source record: 2508
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Hi All,
I'd like to buy some back issues of QEX. Preferably from the last 4 yrs or
so.
Please respond by email.
Thanks, Mike

906. Re: WTB QEX Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-22 22:00:04 UTC
From: Keith <kilowattradio@use-reply-to.invalid>
Message-ID: <EZL9m.423917$jp1.239823@en-nntp-06.dc1.easynews.com>
Source record: 2509
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.swap

On 2009-07-22, amdx <amdx@knology.net> wrote:
> Hi All,
> I'd like to buy some back issues of QEX. Preferably from the last 4 yrs or
> so.
> Please respond by email.
> Thanks, Mike
>
>

You should put a wanted ad on qrz.com & eham.net since
a lot of hams check the want and sale ads every week.

http://www.arrl.org/qex/

--
Best Regards, Keith
http://home.comcast.net/~kilowattradio/

907. Re: WTB QEX Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-27 16:16:14 UTC
From: rkmr15203@yahoo.com
Message-ID: <f3d36e80-6730-48c2-b43f-be9f3ab9f760@f18g2000prf.googlegroups.com>
Source record: 2510
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Jul 22, 3:09 pm, "amdx" <a...@knology.net> wrote:
> Hi All,
> I'd like to buy some back issues of QEX. Preferably from the last 4 yrs or
> so.
> Please respond by email.
>   Thanks, Mike

Go to ARRL.org and buy the CD's.

908. Re: WTB QEX Magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-27 19:07:37 UTC
From: amdx <amdx@knology.net>
Message-ID: <693be$4a6dfafc$d8baf3ed$19734@KNOLOGY.NET>
Source record: 2511
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

<rkmr15203@yahoo.com> wrote in message
news:f3d36e80-6730-48c2-b43f-be9f3ab9f760@f18g2000prf.googlegroups.com...
On Jul 22, 3:09 pm, "amdx" <a...@knology.net> wrote:
> Hi All,
> I'd like to buy some back issues of QEX. Preferably from the last 4 yrs or
> so.
> Please respond by email.
> Thanks, Mike

Go to ARRL.org and buy the CD's.

Ya, I thought about it, but I like the physical magazine.
Thanks, Mike

909. best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-28 15:38:57 UTC
From: "acannell@wwc.com" <acannell@wwc.com>
Message-ID: <e67c31a6-a42c-4c18-8ec0-a09881e8e418@y10g2000prf.googlegroups.com>
Source record: 2512

im an EE, but have never gotten into ham radio. Now, I have a reason!
Im going off roading in the california desert, and I'd like to be able
to communicate back home in San Diego. What band and equipment would
be the best (for both base and mobile) in order to communicate
reliably during the day? Or is this unreasonable?

910. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-28 18:38:12 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <gIadnQj-p7kJ2PLXnZ2dnUVZ_hxi4p2d@web-ster.com>
Source record: 2513

On Tue, 28 Jul 2009 08:38:57 -0700, acannell@wwc.com wrote:

> im an EE, but have never gotten into ham radio. Now, I have a reason! Im
> going off roading in the california desert, and I'd like to be able to
> communicate back home in San Diego. What band and equipment would be the
> best (for both base and mobile) in order to communicate reliably during
> the day? Or is this unreasonable?

Someone will disagree, and we'll both learn something...

For getting through with just your equipment probably HF; on a truck it's probably best to count on 20m, although at that distance 80m is inherently 'better' for ground-wave daytime local-ish communication.

For getting through all the time, and assuming there's coverage, a repeater. It won't get you all the way home unless there's a phone patch available or an intertie. Since repeater clubs have widely varying policies regarding furreners using their equipment, and the most common arrangement is that anyone can use the repeater but only club members get the magic finger ring combination to open the patch or the intertie you may want to do some research.

For getting through all the time, with cost and effort rivaled by buying a second rig to tow behind your main rig just so you can drive home, you could set up for satellite operation. I'm not recommending this unless you just plain want to have fun with it, but there you are.

Note that _all_ of these options except for the phone patch require that you have someone with an amateur license and a matching radio on the other end.

--
www.wescottdesign.com

911. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-28 19:37:29 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <CyC7tUN5N1bKFw5j@g3ohx.demon.co.uk>
Source record: 2514

In message <gIadnQj-p7kJ2PLXnZ2dnUVZ_hxi4p2d@web-ster.com>, Tim Wescott
<tim@seemywebsite.com> writes
>On Tue, 28 Jul 2009 08:38:57 -0700, acannell@wwc.com wrote:
>
>> im an EE, but have never gotten into ham radio. Now, I have a reason! Im
>> going off roading in the california desert, and I'd like to be able to
>> communicate back home in San Diego. What band and equipment would be the
>> best (for both base and mobile) in order to communicate reliably during
>> the day? Or is this unreasonable?
>
>Someone will disagree, and we'll both learn something...
>
>For getting through with just your equipment probably HF; on a truck it's
>probably best to count on 20m, although at that distance 80m is
>inherently 'better' for ground-wave daytime local-ish communication.
>
>For getting through all the time, and assuming there's coverage, a
>repeater. It won't get you all the way home unless there's a phone patch
>available or an intertie. Since repeater clubs have widely varying
>policies regarding furreners using their equipment, and the most common
>arrangement is that anyone can use the repeater but only club members get
>the magic finger ring combination to open the patch or the intertie you
>may want to do some research.
>
>For getting through all the time, with cost and effort rivaled by buying
>a second rig to tow behind your main rig just so you can drive home, you
>could set up for satellite operation. I'm not recommending this unless
>you just plain want to have fun with it, but there you are.
>
>Note that _all_ of these options except for the phone patch require that
>you have someone with an amateur license and a matching radio on the
>other end.
>
In the height of summer, in daytime, a maximum of around 300 miles would
be normal for 80m, but I think you'll be lucky reliably to get 500
miles. In fact, apart from very local stations, you could find 80m
totally dead between 11am and 2pm. Depending on ground conductivity,
groundwave goes out to around 20 miles before skywave really takes over.

If the sunspots on the sun had been a bit more active, and conditions on
40m had been 'normal', this band would have been a the definite
'general-purpose' choice. Groundwave is noticeably less than on 80m.
Typical communication range is 50 to 500+ miles.

On 20m, 100 miles is a bit close. You're unlikely to get reliable
communication at less than 250 or 300 miles. Groundwave is even less
than 40 - maybe only 5 miles.
--
Ian

912. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-28 20:24:04 UTC
From: "Geoffrey S. Mendelson" <gsm@mendelson.com>
Message-ID: <slrnh6unej.jno.gsm@cable.mendelson.com>
Source record: 2515

Ian Jackson wrote:
> On 20m, 100 miles is a bit close. You're unlikely to get reliable
> communication at less than 250 or 300 miles. Groundwave is even less
> than 40 - maybe only 5 miles.

I think you might be better off getting a CB. If only because when you need help, you are much more likely to find someone nearby with the ability to reach you or summon help.

If you want reliable communication over that terrain and distance, you need a satellite phone. Every else ranges from "will never work" to "probably will work most of the time", but not "will always work".

Of course the big question is why? Are you looking for help if you need it? Are you just looking for a way "phone home"? Do you expect to have your employer/customers call you for support?

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM

913. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-28 20:48:14 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <XGf+w3ROQ2bKFwo2@g3ohx.demon.co.uk>
Source record: 2516

In message <slrnh6unej.jno.gsm@cable.mendelson.com>, Geoffrey S.
Mendelson <gsm@mendelson.com> writes
>Ian Jackson wrote:
>> On 20m, 100 miles is a bit close. You're unlikely to get reliable
>> communication at less than 250 or 300 miles. Groundwave is even less
>> than 40 - maybe only 5 miles.
>
>I think you might be better off getting a CB. If only because when you need
>help, you are much more likely to find someone nearby with the ability to
>reach you or summon help.
>
>If you want reliable communication over that terrain and distance, you
>need a satellite phone. Every else ranges from "will never work" to
>"probably will work most of the time", but not "will always work".
>
>Of course the big question is why? Are you looking for help if you need it?
>Are you just looking for a way "phone home"? Do you expect to have your
>employer/customers call you for support?
>
Agreed. Unless there are any hills in the way, legal 27MHz CB should get
you a reliable 5 to 10 miles and, in the USA, I believe is a lot more
popular than elsewhere, and you could well be within range of other CB
users. And you don't need to pass an exam to get a licence (or even have
a licence). However, especially for real emergencies, it would be unwise
to rely on any ad hoc forms of radio communication. A satellite phone
would seem to be the way to go.
--
Ian

914. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-28 21:16:56 UTC
From: "acannell@wwc.com" <acannell@wwc.com>
Message-ID: <f07c20d1-6cee-4515-ab9c-2b67aa139f1e@v23g2000pro.googlegroups.com>
Source record: 2517

Thank you for all your excellent and useful responses!

To clarify my purpose:

1- I've been waiting for an excuse to get into Ham radio. I'm very interested in learning RF circuitry (Experimental Methods in RF Design is enroute as we speak), and this is a perfect opportunity, because I actually need it! So Im up for getting a license.

2- The purpose of the radio is for emergency and for the cool factor of being able to talk to home from 100+ miles away in the desert and tell them about all the sand and rocks i see. Exciting for them!

3- The CB does sound better for emergency. So now, lets change the purpose of the ham radio to just "cool of taking to home 100+ miles away". And I will get a CB for emergency.

I had been leaning toward 20 meters since it has been described everywhere as the DX band of choice. Now I see that it may not work well so "close" as 100 miles. But wouldnt 80 meters have even more of a problem? I am still not clear on which band to use...maybe some more help please?

915. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-28 21:29:05 UTC
From: "Geoffrey S. Mendelson" <gsm@mendelson.com>
Message-ID: <slrnh6urbl.nev.gsm@cable.mendelson.com>
Source record: 2518

Ian Jackson wrote:
> Agreed. Unless there are any hills in the way, legal 27MHz CB should get
> you a reliable 5 to 10 miles and, in the USA, I believe is a lot more
> popular than elsewhere, and you could well be within range of other CB
> users.

From what I have read it is very popular in the EU which has far less limitations on what you can do with it. There seems to be no practical limitation on equipment and power, I often see articles about people using 100 watt ham rigs, transmitting FM and packet data.

However, that's almost irrelevant, a 5 watt rig, even a 1970' handheld with channels 9,14 and 19 will do, a 40 channel ssb rig would almost be too much.

To keep it almost on topic, if you were to buy a long whip antenna, fold it over, (run it horizontaly), and connect it to an autotuner, you could use it for CB and NVIS ham communication.

NVIS is an interesting mode of communication, it uses vertical skywaves to get wider range local communication from HF radio.

It may all be a moot point anyway. If you join a club they will probably tell you what equipment you need. They probably standardized on something readily available without a license such as CB's, FRS or GMRS, or possibly if they thought no one would notice VHF marine radios (which are illegal to use on land, but required for almost anything that floats).

Geoff.
--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM

916. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-28 21:34:04 UTC
From: "Geoffrey S. Mendelson" <gsm@mendelson.com>
Message-ID: <slrnh6urhc.oau.gsm@cable.mendelson.com>
Source record: 2519

acannell@wwc.com wrote:
> 2- The purpose of the radio is for emergency and for the cool factor
> of being able to talk to home from 100+ miles away in the desert and
> tell them about all the sand and rocks i see. Exciting for them!

Ok, so that needs a general class or better license at both end. Do you
have a family member interested too?

> 3- The CB does sound better for emergency. So now, lets change the
> purpose of the ham radio to just "cool of taking to home 100+ miles
> away". And I will get a CB for emergency.
>
> I had been leaning toward 20 meters since it has been described
> everywhere as the DX band of choice. Now I see that it may not work
> well so "close" as 100 miles. But wouldnt 80 meters have even more of
> a problem? I am still not clear on which band to use...maybe some more
> help please?

Look up NVIS, I described it in a post that crossed yours.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM

917. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-28 22:51:39 UTC
From: Bill M <radioexray@geeemail.com>
Message-ID: <h4nvdt04dj@news3.newsguy.com>
Source record: 2520

acannell@wwc.com wrote:
> Thank you for all your excellent and useful responses!
>
> To clarify my purpose:
>
> 1- I've been waiting for an excuse to get into Ham radio. I'm very
> interested in learning RF circuitry (Experimental Methods in RF Design
> is enroute as we speak), and this is a perfect opportunity, because I
> actually need it! So Im up for getting a license.
>
> 2- The purpose of the radio is for emergency and for the cool factor
> of being able to talk to home from 100+ miles away in the desert and
> tell them about all the sand and rocks i see. Exciting for them!
>
> 3- The CB does sound better for emergency. So now, lets change the
> purpose of the ham radio to just "cool of taking to home 100+ miles
> away". And I will get a CB for emergency.
>
> I had been leaning toward 20 meters since it has been described
> everywhere as the DX band of choice. Now I see that it may not work
> well so "close" as 100 miles. But wouldnt 80 meters have even more of
> a problem? I am still not clear on which band to use...maybe some more
> help please?
>
>
I guess a cellphone is out of range? You're not going to have reliable
"100+ mile coverage" with a CB or even with ham radio on a simple "push
button to talk" basis unless both parties are licenced and have some
knowledge about how radio works.
You need one of those 'illegal' phones like they sell in Brasil :)

Sat phones do this type of thing, not inexpensive though. Some of those
Brasilian phones illegally utilise military frequencies via US-DOD
satellites!

May I recommend a digital camera, 99 cent spiral bound notebook and a
pencil as the latest and least inexpensive technological breakthrough?

-Bill

918. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-28 22:54:41 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <P6Q4PMZxG4bKFwIF@g3ohx.demon.co.uk>
Source record: 2521

In message <slrnh6urbl.nev.gsm@cable.mendelson.com>, Geoffrey S.
Mendelson <gsm@mendelson.com> writes
>Ian Jackson wrote:
>> Agreed. Unless there are any hills in the way, legal 27MHz CB should get
>> you a reliable 5 to 10 miles and, in the USA, I believe is a lot more
>> popular than elsewhere, and you could well be within range of other CB
>> users.
>
>From what I have read it is very popular in the EU which has far less
>limitations on what you can do with it. There seems to be no practical
>limitation on equipment and power, I often see articles about people
>using 100 watt ham rigs, transmitting FM and packet data.
>
Not legally! In the UK, CB is limited to 4W of FM. Most other European
countries are very similar, although some do also allow SSB (and maybe
even AM?).

>However, that's almost irrelevant, a 5 watt rig, even a 1970' handheld
>with channels 9,14 and 19 will do, a 40 channel ssb rig would almost be
>too much.
>
A handheld on a whip antenna might get you 20 miles but, more likely, 2.

>To keep it almost on topic, if you were to buy a long whip antenna, fold it
>over, (run it horizontaly), and connect it to an autotuner, you could use it
>for CB and NVIS ham communication.
>
>NVIS is an interesting mode of communication, it uses vertical skywaves to
>get wider range local communication from HF radio.
>
I don't think that you get much NVIS on the higher HF amateur bands.
However, you certainly do on 80m, where (at least in the UK) most
horizontal antennas are rarely much higher than 30' or 40'. The RF goes
straight up, and (if there's anything up there to reflect it back)
straight down again. In summer daytime, the RF tends to get absorbed by
the low-level D-layer (rather than reflected), so ranges are short, and
signal levels poor. This disperses at night, and the much-higher F-layer
allows a longer-range 'bounce' - even for signals with high-angle
radiation. Most really long distance stuff is via vertical antennas,
which are notoriously poor for relatively short-distance working (beyond
groundwave range). However, above around 5 or 6MHz, high-angle signals
tend to go straight through the ionosphere, and are lost for ever.

>It may all be a moot point anyway. If you join a club they will probably tell
>you what equipment you need. They probably standardized on something readily
>available without a license such as CB's, FRS or GMRS, or possibly if they
>thought no one would notice VHF marine radios (which are illegal to use
>on land, but required for almost anything that floats).
>
I don't want to be a 'misery-guts', but I would be a bit circumspect
about the idea of 'getting into amateur radio' because you want to be
able talk to the folks back home when you are on holiday. If you have no
previous experience of the characteristics of the amateur bands,
equipment, antennas etc, it's highly unlikely that you will be very
successful. To avoid disappointment, it might be best to stick to
tried-and-tested technology. On the other hand, why not simply forget
about the folks at home, enjoy your holiday, and take up amateur radio
when you get back!
--
Ian

919. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-28 23:52:10 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <gIadnQr-p7m3EvLXnZ2dnUVZ_hxi4p2d@web-ster.com>
Source record: 2522

On Tue, 28 Jul 2009 14:16:56 -0700, acannell@wwc.com wrote:

> Thank you for all your excellent and useful responses!
>
> To clarify my purpose:
>
> 1- I've been waiting for an excuse to get into Ham radio. I'm very
> interested in learning RF circuitry (Experimental Methods in RF Design
> is enroute as we speak), and this is a perfect opportunity, because I
> actually need it! So Im up for getting a license.

Go for it, then! You'll find that building stuff is definitely something that's only worth it if you have fun -- the days of building stuff on the cheap from dead TVs are long gone.

> 2- The purpose of the radio is for emergency and for the cool factor of
> being able to talk to home from 100+ miles away in the desert and tell
> them about all the sand and rocks i see. Exciting for them!

Hey! What about the rest of the world! You can talk to them, too.

> 3- The CB does sound better for emergency. So now, lets change the
> purpose of the ham radio to just "cool of taking to home 100+ miles
> away". And I will get a CB for emergency.
>
> I had been leaning toward 20 meters since it has been described
> everywhere as the DX band of choice. Now I see that it may not work well
> so "close" as 100 miles. But wouldnt 80 meters have even more of a
> problem? I am still not clear on which band to use...maybe some more
> help please?

Nearly all modern HF rigs cover 160 to 10 meters, so what you operate on out there is pretty much limited by your antenna. What band is good is mostly determined by the state of the ionosphere, which changes with the day, time of day, day of the year, and the state of the sun. So I'd recommend that you get or make an antenna that's good on a lot of bands, and find what works best for you.

The only real caveat to that is that longer wavelengths and small antennas don't go well together, so the system tends to be much lossier for 40m and longer with your average car-mount antenna. That doesn't mean it can't work, it just means that you have to take more care with the antenna, or plan on packing a BIG antenna that you can put up when you stop.

--
www.wescottdesign.com

920. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-29 02:48:40 UTC
From: "acannell@wwc.com" <acannell@wwc.com>
Message-ID: <784e660a-1708-4bc1-bc3c-69ddd749f68c@u38g2000pro.googlegroups.com>
Source record: 2523

On Jul 28, 3:54 pm, Ian Jackson
<ianREMOVETHISjack...@g3ohx.demon.co.uk> wrote:
> In message <slrnh6urbl.nev....@cable.mendelson.com>, Geoffrey S.
> Mendelson <g...@mendelson.com> writes>Ian Jackson wrote:
> >> Agreed. Unless there are any hills in the way, legal 27MHz CB should get
> >> you a reliable 5 to 10 miles and, in the USA, I believe is a lot more
> >> popular than elsewhere, and you could well be within range of other CB
> >> users.
>
> >From what I have read it is very popular in the EU which has far less
> >limitations on what you can do with it. There seems to be no practical
> >limitation on equipment and power, I often see articles about people
> >using 100 watt ham rigs, transmitting FM and packet data.
>
> Not legally! In the UK, CB is limited to 4W of FM. Most other European
> countries are very similar, although some do also allow SSB (and maybe
> even AM?).
>
> >However, that's almost irrelevant, a 5 watt rig, even a 1970' handheld
> >with channels 9,14 and 19 will do, a 40 channel ssb rig would almost be
> >too much.
>
> A handheld on a whip antenna might get you 20 miles but, more likely, 2.
>
> >To keep it almost on topic, if you were to buy a long whip antenna, fold it
> >over, (run it horizontaly), and connect it to an autotuner, you could use it
> >for CB and NVIS ham communication.
>
> >NVIS is an interesting mode of communication, it uses vertical skywaves to
> >get wider range local communication from HF radio.
>
> I don't think that you get much NVIS on the higher HF amateur bands.
> However, you certainly do on 80m, where (at least in the UK) most
> horizontal antennas are rarely much higher than 30' or 40'. The RF goes
> straight up, and (if there's anything up there to reflect it back)
> straight down again. In summer daytime, the RF tends to get absorbed by
> the low-level D-layer (rather than reflected), so ranges are short, and
> signal levels poor. This disperses at night, and the much-higher F-layer
> allows a longer-range 'bounce' - even for signals with high-angle
> radiation. Most really long distance stuff is via vertical antennas,
> which are notoriously poor for relatively short-distance working (beyond
> groundwave range). However, above around 5 or 6MHz, high-angle signals
> tend to go straight through the ionosphere, and are lost for ever.

>
> >It may all be a moot point anyway. If you join a club they will probably tell
> >you what equipment you need. They probably standardized on something readily
> >available without a license such as CB's, FRS or GMRS, or possibly if they
> >thought no one would notice VHF marine radios (which are illegal to use
> >on land, but required for almost anything that floats).
>
> I don't want to be a 'misery-guts', but I would be a bit circumspect
> about the idea of 'getting into amateur radio' because you want to be
> able talk to the folks back home when you are on holiday. If you have no
> previous experience of the characteristics of the amateur bands,
> equipment, antennas etc, it's highly unlikely that you will be very
> successful. To avoid disappointment, it might be best to stick to
> tried-and-tested technology. On the other hand, why not simply forget
> about the folks at home, enjoy your holiday, and take up amateur radio
> when you get back!
> --
> Ian

Is it just me or is there ALWAYS someone on this group explaining why
somebody else should not try something or do something? How on earth
is anyone supposed to learn anything if they only do what they have
knowledge and experience in? This is what college does to people,
makes them extremely wary of learning things on their own or seeing
other people attempt to do so.

921. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-29 05:44:59 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <gIadnQX-p7IGfPLXnZ2dnUVZ_hxi4p2d@web-ster.com>
Source record: 2524

On Tue, 28 Jul 2009 19:48:40 -0700, acannell@wwc.com wrote:

> On Jul 28, 3:54 pm, Ian Jackson
> <ianREMOVETHISjack...@g3ohx.demon.co.uk> wrote:
>> In message <slrnh6urbl.nev....@cable.mendelson.com>, Geoffrey S.
>> Mendelson <g...@mendelson.com> writes>Ian Jackson wrote:
>> >> Agreed. Unless there are any hills in the way, legal 27MHz CB should
>> >> get you a reliable 5 to 10 miles and, in the USA, I believe is a lot
>> >> more popular than elsewhere, and you could well be within range of
>> >> other CB users.
>>
>> >From what I have read it is very popular in the EU which has far less
>> >limitations on what you can do with it. There seems to be no practical
>> >limitation on equipment and power, I often see articles about people
>> >using 100 watt ham rigs, transmitting FM and packet data.
>>
>> Not legally! In the UK, CB is limited to 4W of FM. Most other European
>> countries are very similar, although some do also allow SSB (and maybe
>> even AM?).
>>
>> >However, that's almost irrelevant, a 5 watt rig, even a 1970' handheld
>> >with channels 9,14 and 19 will do, a 40 channel ssb rig would almost
>> >be too much.
>>
>> A handheld on a whip antenna might get you 20 miles but, more likely,
>> 2.
>>
>> >To keep it almost on topic, if you were to buy a long whip antenna,
>> >fold it over, (run it horizontaly), and connect it to an autotuner,
>> >you could use it for CB and NVIS ham communication.
>>
>> >NVIS is an interesting mode of communication, it uses vertical
>> >skywaves to get wider range local communication from HF radio.
>>
>> I don't think that you get much NVIS on the higher HF amateur bands.
>> However, you certainly do on 80m, where (at least in the UK) most
>> horizontal antennas are rarely much higher than 30' or 40'. The RF goes
>> straight up, and (if there's anything up there to reflect it back)
>> straight down again. In summer daytime, the RF tends to get absorbed by
>> the low-level D-layer (rather than reflected), so ranges are short, and
>> signal levels poor. This disperses at night, and the much-higher
>> F-layer allows a longer-range 'bounce' - even for signals with
>> high-angle radiation. Most really long distance stuff is via vertical

>> antennas, which are notoriously poor for relatively short-distance
>> working (beyond groundwave range). However, above around 5 or 6MHz,
>> high-angle signals tend to go straight through the ionosphere, and are
>> lost for ever.
>>
>> >It may all be a moot point anyway. If you join a club they will
>> >probably tell you what equipment you need. They probably standardized
>> >on something readily available without a license such as CB's, FRS or
>> >GMRS, or possibly if they thought no one would notice VHF marine
>> >radios (which are illegal to use on land, but required for almost
>> >anything that floats).
>>
>> I don't want to be a 'misery-guts', but I would be a bit circumspect
>> about the idea of 'getting into amateur radio' because you want to be
>> able talk to the folks back home when you are on holiday. If you have
>> no previous experience of the characteristics of the amateur bands,
>> equipment, antennas etc, it's highly unlikely that you will be very
>> successful. To avoid disappointment, it might be best to stick to
>> tried-and-tested technology. On the other hand, why not simply forget
>> about the folks at home, enjoy your holiday, and take up amateur radio
>> when you get back!
>> --
>> Ian
>
> Is it just me or is there ALWAYS someone on this group explaining why
> somebody else should not try something or do something? How on earth is
> anyone supposed to learn anything if they only do what they have
> knowledge and experience in? This is what college does to people, makes
> them extremely wary of learning things on their own or seeing other
> people attempt to do so.

So you're explaining why I shouldn't go to college?

Hey, thanks!

:-)

--
www.wescottdesign.com

922. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-29 07:24:54 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <VL9uTrCGI$bKFwZo@g3ohx.demon.co.uk>
Source record: 2525

```
In message <gIadnQX-p7lGfPLXnZ2dnUVZ_hxi4p2d@web-ster.com>, Tim Wescott
<tim@seemywebsite.com> writes
>On Tue, 28 Jul 2009 19:48:40 -0700, acannell@wwc.com wrote:
>
>> On Jul 28, 3:54ï¿½pm, Ian Jackson
>> <ianREMOVETHISjack...@g3ohx.demon.co.uk> wrote:
>>> In message <slrnh6urbl.nev....@cable.mendelson.com>, Geoffrey S.
>>> Mendelson <g...@mendelson.com> writes>Ian Jackson wrote:
>>> >> Agreed. Unless there are any hills in the way, legal 27MHz CB should
>>> >> get you a reliable 5 to 10 miles and, in the USA, I believe is a lot
>>> >> more popular than elsewhere, and you could well be within range of
>>> >> other CB users.
>>>
>>> >From what I have read it is very popular in the EU which has far less
>>> >limitations on what you can do with it. There seems to be no practical
>>> >limitation on equipment and power, I often see articles about people
>>> >using 100 watt ham rigs, transmitting FM and packet data.
>>>
>>> Not legally! In the UK, CB is limited to 4W of FM. Most other European
>>> countries are very similar, although some do also allow SSB (and maybe
>>> even AM?).
>>>
>>> >However, that's almost irrelevant, a 5 watt rig, even a 1970' handheld
>>> >with channels 9,14 and 19 will do, a 40 channel ssb rig would almost
>>> >be too much.
>>>
>>> A handheld on a whip antenna might get you 20 miles but, more likely,
>>> 2.
>>>
>>> >To keep it almost on topic, if you were to buy a long whip antenna,
>>> >fold it over, (run it horizontaly), and connect it to an autotuner,
>>> >you could use it for CB and NVIS ham communication.
>>>
>>> >NVIS is an interesting mode of communication, it uses vertical
>>> >skywaves to get wider range local communication from HF radio.
>>>
>>> I don't think that you get much NVIS on the higher HF amateur bands.
>>> However, you certainly do on 80m, where (at least in the UK) most
>>> horizontal antennas are rarely much higher than 30' or 40'. The RF goes
>>> straight up, and (if there's anything up there to reflect it back)
>>> straight down again. In summer daytime, the RF tends to get absorbed by
>>> the low-level D-layer (rather than reflected), so ranges are short, and
>>> signal levels poor. This disperses at night, and the much-higher
```

>>> F-layer allows a longer-range 'bounce' - even for signals with
>>> high-angle radiation. Most really long distance stuff is via vertical
>>> antennas, which are notoriously poor for relatively short-distance
>>> working (beyond groundwave range). However, above around 5 or 6MHz,
>>> high-angle signals tend to go straight through the ionosphere, and are
>>> lost for ever.
>>>
>>> >It may all be a moot point anyway. If you join a club they will
>>> >probably tell you what equipment you need. They probably standardized
>>> >on something readily available without a license such as CB's, FRS or
>>> >GMRS, or possibly if they thought no one would notice VHF marine
>>> >radios (which are illegal to use on land, but required for almost
>>> >anything that floats).
>>>
>>> I don't want to be a 'misery-guts', but I would be a bit circumspect
>>> about the idea of 'getting into amateur radio' because you want to be
>>> able talk to the folks back home when you are on holiday. If you have
>>> no previous experience of the characteristics of the amateur bands,
>>> equipment, antennas etc, it's highly unlikely that you will be very
>>> successful. To avoid disappointment, it might be best to stick to
>>> tried-and-tested technology. On the other hand, why not simply forget
>>> about the folks at home, enjoy your holiday, and take up amateur radio
>>> when you get back!
>>> --
>>> Ian
>>
>> Is it just me or is there ALWAYS someone on this group explaining why
>> somebody else should not try something or do something? How on earth is
>> anyone supposed to learn anything if they only do what they have
>> knowledge and experience in? This is what college does to people, makes
>> them extremely wary of learning things on their own or seeing other
>> people attempt to do so.
>
>So you're explaining why I shouldn't go to college?
>
>Hey, thanks!
>
I think that the OP is misinterpreting my comments! Trying to keep
regular communication via HF radio - and especially HF amateur radio -
can be very disappointing, especially at times like now, when there are
virtually no sunspots to help propagation go with 'a bit of a zing'
(sorry if I'm being too technical!).

It is indeed great fun to try and keep regular communication schedules,
but I wouldn't take up amateur radio just to be able to talk to family
and friends while on holiday - especially if you are going to set out on
your holiday before you have had time to gain some experience about
which bands (and which frequencies in the bands) to use, which times of
day are best, which type of antenna you need to use etc.

There's a bit more to amateur radio than buying an off-the-shelf 100W multiband transceiver and an antenna (or antennas), connecting everything together, powering up and pressing the mic PTT button. But I'm sure the OP is already fully aware of this. I'm just a bit concerned that his planned debut into amateur radio might prove a little disappointing, and deter him from progressing further in the noble art. I'm certainly not trying to dissuade him.
--
Ian

923. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-29 10:20:55 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <O6Sdnfo2k9sVv-3XnZ2dnUVZ_oGdnZ2d@bright.net>
Source record: 2526

acannell@wwc.com wrote:
> Thank you for all your excellent and useful responses!
>
> To clarify my purpose:
>
> 1- I've been waiting for an excuse to get into Ham radio. I'm very
> interested in learning RF circuitry (Experimental Methods in RF Design
> is enroute as we speak), and this is a perfect opportunity, because I
> actually need it! So Im up for getting a license.
>
> 2- The purpose of the radio is for emergency and for the cool factor
> of being able to talk to home from 100+ miles away in the desert and
> tell them about all the sand and rocks i see. Exciting for them!
>
> 3- The CB does sound better for emergency. So now, lets change the
> purpose of the ham radio to just "cool of taking to home 100+ miles
> away". And I will get a CB for emergency.
>
> I had been leaning toward 20 meters since it has been described
> everywhere as the DX band of choice. Now I see that it may not work
> well so "close" as 100 miles. But wouldnt 80 meters have even more of
> a problem? I am still not clear on which band to use...maybe some more
> help please?
>
>
Get a modern solid state radio that covers all HF ham bands and an
antenna such as the "Outbacker" or "Screwdriver" so that you have one
mobile antenna capable of being tuned to any HF band. I would say that
40 meters would be one of the better choices during the day but with the
multiband antenna, you try the different bands until you find the one
that works at the time you try calling.

Scott
N0EDV

924. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-29 14:39:39 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <drWdnWzFWLC2wu3XnZ2dnUVZ_jpi4p2d@web-ster.com>
Source record: 2527

On Wed, 29 Jul 2009 08:24:54 +0100, Ian Jackson wrote:

> In message <gIadnQX-p7lGfPLXnZ2dnUVZ_hxi4p2d@web-ster.com>, Tim Wescott
> <tim@seemywebsite.com> writes
>>On Tue, 28 Jul 2009 19:48:40 -0700, acannell@wwc.com wrote:
>>
>>> On Jul 28, 3:54 pm, Ian Jackson
>>> <ianREMOVETHISjack...@g3ohx.demon.co.uk> wrote:
>>>> In message <slrnh6urbl.nev....@cable.mendelson.com>, Geoffrey S.
>>>> Mendelson <g...@mendelson.com> writes>Ian Jackson wrote:
>>>> >> Agreed. Unless there are any hills in the way, legal 27MHz CB
>>>> >> should get you a reliable 5 to 10 miles and, in the USA, I believe
>>>> >> is a lot more popular than elsewhere, and you could well be within
>>>> >> range of other CB users.
>>>>
>>>> >From what I have read it is very popular in the EU which has far
>>>> >less limitations on what you can do with it. There seems to be no
>>>> >practical limitation on equipment and power, I often see articles
>>>> >about people using 100 watt ham rigs, transmitting FM and packet
>>>> >data.
>>>>
>>>> Not legally! In the UK, CB is limited to 4W of FM. Most other
>>>> European countries are very similar, although some do also allow SSB
>>>> (and maybe even AM?).
>>>>
>>>> >However, that's almost irrelevant, a 5 watt rig, even a 1970'
>>>> >handheld with channels 9,14 and 19 will do, a 40 channel ssb rig
>>>> >would almost be too much.
>>>>
>>>> A handheld on a whip antenna might get you 20 miles but, more likely,
>>>> 2.
>>>>
>>>> >To keep it almost on topic, if you were to buy a long whip antenna,
>>>> >fold it over, (run it horizontaly), and connect it to an autotuner,
>>>> >you could use it for CB and NVIS ham communication.
>>>>
>>>> >NVIS is an interesting mode of communication, it uses vertical
>>>> >skywaves to get wider range local communication from HF radio.
>>>>
>>>> I don't think that you get much NVIS on the higher HF amateur bands.
>>>> However, you certainly do on 80m, where (at least in the UK) most
>>>> horizontal antennas are rarely much higher than 30' or 40'. The RF
>>>> goes straight up, and (if there's anything up there to reflect it

>>>> back) straight down again. In summer daytime, the RF tends to get
>>>> absorbed by the low-level D-layer (rather than reflected), so ranges
>>>> are short, and signal levels poor. This disperses at night, and the
>>>> much-higher F-layer allows a longer-range 'bounce' - even for signals
>>>> with high-angle radiation. Most really long distance stuff is via
>>>> vertical antennas, which are notoriously poor for relatively
>>>> short-distance working (beyond groundwave range). However, above
>>>> around 5 or 6MHz, high-angle signals tend to go straight through the
>>>> ionosphere, and are lost for ever.
>>>>
>>>> >It may all be a moot point anyway. If you join a club they will
>>>> >probably tell you what equipment you need. They probably
>>>> >standardized on something readily available without a license such
>>>> >as CB's, FRS or GMRS, or possibly if they thought no one would
>>>> >notice VHF marine radios (which are illegal to use on land, but
>>>> >required for almost anything that floats).
>>>>
>>>> I don't want to be a 'misery-guts', but I would be a bit circumspect
>>>> about the idea of 'getting into amateur radio' because you want to be
>>>> able talk to the folks back home when you are on holiday. If you have
>>>> no previous experience of the characteristics of the amateur bands,
>>>> equipment, antennas etc, it's highly unlikely that you will be very
>>>> successful. To avoid disappointment, it might be best to stick to
>>>> tried-and-tested technology. On the other hand, why not simply forget
>>>> about the folks at home, enjoy your holiday, and take up amateur
>>>> radio when you get back!
>>>> --
>>>> Ian
>>>
>>> Is it just me or is there ALWAYS someone on this group explaining why
>>> somebody else should not try something or do something? How on earth
>>> is anyone supposed to learn anything if they only do what they have
>>> knowledge and experience in? This is what college does to people,
>>> makes them extremely wary of learning things on their own or seeing
>>> other people attempt to do so.
>>
>>So you're explaining why I shouldn't go to college?
>>
>>Hey, thanks!
>>
> I think that the OP is misinterpreting my comments! Trying to keep
> regular communication via HF radio - and especially HF amateur radio -
> can be very disappointing, especially at times like now, when there are
> virtually no sunspots to help propagation go with 'a bit of a zing'
> (sorry if I'm being too technical!).
>
> It is indeed great fun to try and keep regular communication schedules,
> but I wouldn't take up amateur radio just to be able to talk to family
> and friends while on holiday - especially if you are going to set out on
> your holiday before you have had time to gain some experience about

> which bands (and which frequencies in the bands) to use, which times of
> day are best, which type of antenna you need to use etc.
>
> There's a bit more to amateur radio than buying an off-the-shelf 100W
> multiband transceiver and an antenna (or antennas), connecting
> everything together, powering up and pressing the mic PTT button. But
> I'm sure the OP is already fully aware of this. I'm just a bit concerned
> that his planned debut into amateur radio might prove a little
> disappointing, and deter him from progressing further in the noble art.
> I'm certainly not trying to dissuade him.

Nah, he already said he's just using the "talk to home" thing as an excuse to get him going, and he's already agreed to jettison it and get into ham radio anyway (Good for you 'acannell'!).

And while there's more to it than connecting the bits together and pushing the PTT, that's a good start.

(OP: Getting into a club is best; if you can't do that then at least get a copy of the ARRL Operations Manual and read it before you go stomping all over the airwaves. You'll have "newbie" written all over you no matter what -- you want to aim for it to be "polite newbie" so people will be nice.)

(And expect it to be a bit like newsgroups -- there are some read losers out there and a few of them have call signs and HF rigs. Like any other human activity there will be some hazing to politely ignore.)

--
www.wescottdesign.com

925. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-29 15:10:01 UTC
From: "acannell@wwc.com" <acannell@wwc.com>
Message-ID: <7a803871-590a-4cae-b59a-deb355fcc9d7@v37g2000prg.googlegroups.com>
Source record: 2529

On Jul 29, 12:24 am, Ian Jackson
<ianREMOVETHISjack...@g3ohx.demon.co.uk> wrote:
> In message <gIadnQX-p7lGfPLXnZ2dnUVZ_hxi4...@web-ster.com>, Tim Wescott
> <t...@seemywebsite.com> writes
>
>
>
> >On Tue, 28 Jul 2009 19:48:40 -0700, acann...@wwc.com wrote:
>
> >> On Jul 28, 3:54 pm, Ian Jackson
> >> <ianREMOVETHISjack...@g3ohx.demon.co.uk> wrote:
> >>> In message <slrnh6urbl.nev....@cable.mendelson.com>, Geoffrey S.
> >>> Mendelson <g...@mendelson.com> writes>Ian Jackson wrote:
> >>> >> Agreed. Unless there are any hills in the way, legal 27MHz CB should
> >>> >> get you a reliable 5 to 10 miles and, in the USA, I believe is a lot
> >>> >> more popular than elsewhere, and you could well be within range of
> >>> >> other CB users.
>
> >>> >From what I have read it is very popular in the EU which has far less
> >>> >limitations on what you can do with it. There seems to be no practical
> >>> >limitation on equipment and power, I often see articles about people
> >>> >using 100 watt ham rigs, transmitting FM and packet data.
>
> >>> Not legally! In the UK, CB is limited to 4W of FM. Most other European
> >>> countries are very similar, although some do also allow SSB (and maybe
> >>> even AM?).
>
> >>> >However, that's almost irrelevant, a 5 watt rig, even a 1970' handheld
> >>> >with channels 9,14 and 19 will do, a 40 channel ssb rig would almost
> >>> >be too much.
>
> >>> A handheld on a whip antenna might get you 20 miles but, more likely,
> >>> 2.
>
> >>> >To keep it almost on topic, if you were to buy a long whip antenna,
> >>> >fold it over, (run it horizontaly), and connect it to an autotuner,
> >>> >you could use it for CB and NVIS ham communication.
>
> >>> >NVIS is an interesting mode of communication, it uses vertical
> >>> >skywaves to get wider range local communication from HF radio.
>
> >>> I don't think that you get much NVIS on the higher HF amateur bands.
> >>> However, you certainly do on 80m, where (at least in the UK) most

> >>> horizontal antennas are rarely much higher than 30' or 40'. The RF goes
> >>> straight up, and (if there's anything up there to reflect it back)
> >>> straight down again. In summer daytime, the RF tends to get absorbed by
> >>> the low-level D-layer (rather than reflected), so ranges are short, and
> >>> signal levels poor. This disperses at night, and the much-higher
> >>> F-layer allows a longer-range 'bounce' - even for signals with
> >>> high-angle radiation. Most really long distance stuff is via vertical
> >>> antennas, which are notoriously poor for relatively short-distance
> >>> working (beyond groundwave range). However, above around 5 or 6MHz,
> >>> high-angle signals tend to go straight through the ionosphere, and are
> >>> lost for ever.
>
> >>> >It may all be a moot point anyway. If you join a club they will
> >>> >probably tell you what equipment you need. They probably standardized
> >>> >on something readily available without a license such as CB's, FRS or
> >>> >GMRS, or possibly if they thought no one would notice VHF marine
> >>> >radios (which are illegal to use on land, but required for almost
> >>> >anything that floats).
>
> >>> I don't want to be a 'misery-guts', but I would be a bit circumspect
> >>> about the idea of 'getting into amateur radio' because you want to be
> >>> able talk to the folks back home when you are on holiday. If you have
> >>> no previous experience of the characteristics of the amateur bands,
> >>> equipment, antennas etc, it's highly unlikely that you will be very
> >>> successful. To avoid disappointment, it might be best to stick to
> >>> tried-and-tested technology. On the other hand, why not simply forget
> >>> about the folks at home, enjoy your holiday, and take up amateur radio
> >>> when you get back!
> >>> --
> >>> Ian
>
> >> Is it just me or is there ALWAYS someone on this group explaining why
> >> somebody else should not try something or do something? How on earth is
> >> anyone supposed to learn anything if they only do what they have
> >> knowledge and experience in? This is what college does to people, makes
> >> them extremely wary of learning things on their own or seeing other
> >> people attempt to do so.
>
> >So you're explaining why I shouldn't go to college?
>
> >Hey, thanks!
>
> I think that the OP is misinterpreting my comments! Trying to keep
> regular communication via HF radio - and especially HF amateur radio -
> can be very disappointing, especially at times like now, when there are
> virtually no sunspots to help propagation go with 'a bit of a zing'
> (sorry if I'm being too technical!).
>
> It is indeed great fun to try and keep regular communication schedules,
> but I wouldn't take up amateur radio just to be able to talk to family

> and friends while on holiday - especially if you are going to set out on
> your holiday before you have had time to gain some experience about
> which bands (and which frequencies in the bands) to use, which times of
> day are best, which type of antenna you need to use etc.
>
> There's a bit more to amateur radio than buying an off-the-shelf 100W
> multiband transceiver and an antenna (or antennas), connecting
> everything together, powering up and pressing the mic PTT button. But
> I'm sure the OP is already fully aware of this. I'm just a bit concerned
> that his planned debut into amateur radio might prove a little
> disappointing, and deter him from progressing further in the noble art.
> I'm certainly not trying to dissuade him.
> --
> Ian- Hide quoted text -
>
> - Show quoted text -

Ahhh...I see now. Understood! ;)

926. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-29 16:07:45 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <AoadnZiYIqnF-O3XnZ2dnUVZ_hmdnZ2d@earthlink.com>
Source record: 2528

<acannell@wwc.com> wrote in message news:784e660a-1708-4bc1-bc3c-
>Is it just me or is there ALWAYS someone on this group >explaining why
somebody else should not try something or do something? How on earth
is anyone supposed to learn anything if they only do what they have
knowledge and experience in? This is what college does to people,
makes them extremely wary of learning things on their own <or seeing
>other people attempt to do so.

It may have been the way you asked the question. If you had just asked what would be a good way of getting into ham radio and what would it take to talk around 100 to 200 miles for fun the response may have been differant. Your first statements made it seem like you wanted reliable communications for emergencies.

Anyway get a license and have fun. That seems to be your main objective.

If you have not checked into it, the license should be easy for someone that has an electronic background and any RF experiance at all. Just memorize the exect questions and answers. You can find them many places on the internet. You can go to arrl.org for one. Then go to qrz.com and take the practice test to see how well you are doing. You may even want to go there first and see how well you do without any perperation. Having been a ham for over 35 years and into electrical and electronic work, I can run through a test in less than 15 minuits and get around a 85% or higher. That is not even looking at the study questions in many years. I think a 70% is passing.

927. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-29 16:39:05 UTC
From: "Geoffrey S. Mendelson" <gsm@mendelson.com>
Message-ID: <slrnh70uoh.2d4.gsm@cable.mendelson.com>
Source record: 2530

Ralph Mowery wrote:
> If you have not checked into it, the license should be easy for someone that
> has an electronic background and any RF experiance at all. Just memorize
> the exect questions and answers. You can find them many places on the
> internet. You can go to arrl.org for one. Then go to qrz.com and take the
> practice test to see how well you are doing. You may even want to go there
> first and see how well you do without any perperation. Having been a ham
> for over 35 years and into electrical and electronic work, I can run through
> a test in less than 15 minuits and get around a 85% or higher. That is not
> even looking at the study questions in many years. I think a 70% is
> passing.

Ralph, a lot has changed in the last 35 years. The tests are not designed
to make sure that everyone who passes could build a transceiver from
an old AM radio, or recognize the design of one.

They are now based on the concept that many hams will start out with a
store bought rig and work up from that. In order to pass, you have to
show enough understanding of electricity, electronics and RF that you
don't endanger yourself, anyone else or cause any damage to the equipment.

You also have to show enough knowledge of ham bands and operating procedure
that you don't endanger anyone else, though you possibly could get some
people upset.

BTW, have you taken the test recently, over the years it has included new
things that hams did not have to know or care about. When I studied for
the extra exam (1996)*, it included tv stuff such as fields and frames.
Now that NTSC is dead, I wonder if it is still there and if it is, how
long it will be.

Geoff.

* just to be compelete, I never had time to take the 20wpm test before I
moved here, so I have an advanced class license. I live in one of the few
countries in the world that the VEC's were asked NOT to give tests in.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM

928. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-29 18:37:31 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <boidncYZ1-DvFe3XnZ2dnUVZ_qSdnZ2d@earthlink.com>
Source record: 2531

"Geoffrey S. Mendelson" <gsm@mendelson.com> wrote in message
news:slrnh70uoh.2d4.gsm@cable.mendelson.com...
Having been a ham
>> for over 35 years and into electrical and electronic work, I can run
>> through
>> a test in less than 15 minuits and get around a 85% or higher. That is
>> not
>> even looking at the study questions in many years. I think a 70% is
>> passing.
>

> Ralph, a lot has changed in the last 35 years. The tests are not designed
> to make sure that everyone who passes could build a transceiver from
> an old AM radio, or recognize the design of one.
>
> They are now based on the concept that many hams will start out with a
> store bought rig and work up from that. In order to pass, you have to
> show enough understanding of electricity, electronics and RF that you
> don't endanger yourself, anyone else or cause any damage to the equipment.
>
> You also have to show enough knowledge of ham bands and operating
> procedure
> that you don't endanger anyone else, though you possibly could get some
> people upset.
>
> BTW, have you taken the test recently, over the years it has included new
> things that hams did not have to know or care about. When I studied for
> the extra exam (1996)*, it included tv stuff such as fields and frames.
> Now that NTSC is dead, I wonder if it is still there and if it is, how
> long it will be.
>
> Geoff.
>
> * just to be compelete, I never had time to take the 20wpm test before I
> moved here, so I have an advanced class license. I live in one of the few
> countries in the world that the VEC's were asked NOT to give tests in.
>
>
> --
> Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM

I have taken the practice tests on qrz.com several times just to see how
well I can do. That is without doing any studying for them. Took it on

qrz.com a few weeks ago after our club had a hamfest and gave some tests. Just wanted to refresh my memory of the questions.

I am a VEC with the local club. Have been from the time I passed the Extra. Forgot the exect year, but it was about a year before the FCC totally eliminated the 20 wpm code. Have to admitt that if it was not a choice question test that I could not have done the 20 wpm.

The test as it is now is made to get more hams on the air. I think it is good.
Should probably be more on the rules and operating proceduers, sort of like a drivers license test. There are very few new hams that can work on the modern rigs. I can handle the older tube and transisitor rigs, but do not even try to look at the latest rigs.

HOwever the test is a joke. Years ago my wife passed the the Technician test and I doubt she could plug in a rig and hook up the antenna.. Around 1972 I passed the first class phone test. Only 22 years old and had never seen a TV or comercial radio station transmitter, but that licened me to work on them. Never did get into the radio or tv field like I thought I would like to. Did not pay as much as the other jobs I had over the years.

NTSC is dead for comercial use in the usa, but probably will be used in the ham bands for a long time. Just as RTTY is. I have an old modle 19 set for rtty and it is still working. Must be around 50 years old or more by now. You can probably count the number of comercial rtty stations still on the air with one hand now.
Packet was hot for a few years, but I think it is almost gone except for a few DX clusters and the aprs system.
I think there will be some hams on almost all modes that have been used.

73 de KU4PT

929. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-29 20:32:41 UTC
From: JB <nospam@goofball.net>
Message-ID: <Jl2cm.1587$646.1047@nwrddc01.gnilink.net>
Source record: 2532

<acannell@wwc.com> wrote in message
news:e67c31a6-a42c-4c18-8ec0-a09881e8e418@y10g2000prf.googlegroups.com...
> im an EE, but have never gotten into ham radio. Now, I have a reason!
> Im going off roading in the california desert, and I'd like to be able
> to communicate back home in San Diego. What band and equipment would
> be the best (for both base and mobile) in order to communicate
> reliably during the day? Or is this unreasonable?

www.winsystem.org

Click on the link on the right that shows Site info/plots and see if your area is covered. Requires Tech class license or above. May help in areas not covered by cell phone.

HF mobile (requires General class or above) will work in areas not covered by any other infrastructure depending on time of day and frequency selection, which can be a problem because of the limitation of a pre-determined contact schedule. In any case, you should be able to talk to somebody, somewhere who can get to a phone or e-mail. The last resort would be Sat Phone for use anytime, anywhere you can see the sky.

CB has mostly limited range. You might get lucky if you are close enough to a highway or town, but forget about 100-500 miles.

930. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-29 20:42:24 UTC
From: JB <nospam@goofball.net>
Message-ID: <Qu2cm.1588$646.1528@nwrddc01.gnilink.net>
Source record: 2533

40 meters might be better. 20m if conditions permit. 80m at night but is more difficult for mobile ops. Your choice of frequencies depends on time of day, seasonal and subject to the ever changing ionosphere. Typically what frequency works at a given time of day will work the same time the next day but maybe not. Some study and experience is required.

<acannell@wwc.com> wrote in message news:f07c20d1-6cee-4515-ab9c-2b67aa139f1e@v23g2000pro.googlegroups.com...
> Thank you for all your excellent and useful responses!
>
> To clarify my purpose:
>
> 1- I've been waiting for an excuse to get into Ham radio. I'm very
> interested in learning RF circuitry (Experimental Methods in RF Design
> is enroute as we speak), and this is a perfect opportunity, because I
> actually need it! So Im up for getting a license.
>
> 2- The purpose of the radio is for emergency and for the cool factor
> of being able to talk to home from 100+ miles away in the desert and
> tell them about all the sand and rocks i see. Exciting for them!
>
> 3- The CB does sound better for emergency. So now, lets change the
> purpose of the ham radio to just "cool of taking to home 100+ miles
> away". And I will get a CB for emergency.
>
> I had been leaning toward 20 meters since it has been described
> everywhere as the DX band of choice. Now I see that it may not work
> well so "close" as 100 miles. But wouldnt 80 meters have even more of
> a problem? I am still not clear on which band to use...maybe some more
> help please?
>
>

931. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-30 02:25:55 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <c4-dnXrSLZ0umezXnZ2dnUVZ_vxi4p2d@bright.net>
Source record: 2534

JB wrote:

>
> CB has mostly limited range. You might get lucky if you are close enough to
> a highway or town, but forget about 100-500 miles.
>
Unless you buy one of those illegal amps on eBay ;)

932. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-30 04:49:04 UTC
From: "Geoffrey S. Mendelson" <gsm@mendelson.com>
Message-ID: <slrnh729bd.ipe.gsm@cable.mendelson.com>
Source record: 2535

Scott wrote:

> Unless you buy one of those illegal amps on eBay ;)

I was the one who suggested he get a CB in the first place. It was not to give him range, it was because it is more likely if he needs assistance someone nearby will be listening on one.

That's also why I suggested he join an off-roader's club and use whatever radios they do.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM

933. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-30 10:44:33 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <JLGdnXcHeccO5OzXnZ2dnUVZ_sGdnZ2d@bright.net>
Source record: 2536

Geoffrey S. Mendelson wrote:
> Scott wrote:
>
>
>> Unless you buy one of those illegal amps on eBay ;)
>
> I was the one who suggested he get a CB in the first place. It was not to
> give him range, it was because it is more likely if he needs assistance
> someone nearby will be listening on one.
>
> That's also why I suggested he join an off-roader's club and use whatever
> radios they do.
>
> Geoff.
>
>
I understand. Yes, sadly, that is probably true nowadays. Calls on
most any 2M repeater in the USA go mostly unanswered, so if you need
some sort of assitance, CB may be the way to go. However, I applaud the
original poster on wanting to get a ham license regardless of whether it
would be the most practical route for him to take in his quest...for
times when he is not biking or whatever, he can chat with folks in any
of the four corners of the world (and actually, he CAN do it, even while
biking!) :)

Scott
N0EDV

934. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-30 15:18:03 UTC
From: stan <tsanford@nf.sympatico.ca>
Message-ID: <4c2fcc57-93f9-4d2f-96b2-b090f0e2aa70@g6g2000vbr.googlegroups.com>
Source record: 2537

On Jul 28, 7:16 pm, "acann...@wwc.com" <acann...@wwc.com> wrote:
> Thank you for all your excellent and useful responses!
>
> To clarify my purpose:
>
> 1- I've been waiting for an excuse to get into Ham radio. I'm very
> interested in learning RF circuitry (Experimental Methods in RF Design
> is enroute as we speak), and this is a perfect opportunity, because I
> actually need it! So Im up for getting a license.
>
> 2- The purpose of the radio is for emergency and for the cool factor
> of being able to talk to home from 100+ miles away in the desert and
> tell them about all the sand and rocks i see. Exciting for them!
>
> 3- The CB does sound better for emergency. So now, lets change the
> purpose of the ham radio to just "cool of taking to home 100+ miles
> away". And I will get a CB for emergency.
>
> I had been leaning toward 20 meters since it has been described
> everywhere as the DX band of choice. Now I see that it may not work
> well so "close" as 100 miles. But wouldn't 80 meters have even more of
> a problem? I am still not clear on which band to use...maybe some more
> help please?

Just to give some idea of the variability of 'Amateur Bands' due to
solar radiation, time of day etc.
Back some 50+ years ago had a war surplus receiver and on 20 metres
(14 megahertz) band could listen to the Australian amateurs rolling in
and chatting with the UK and Stateside hams early morning while f
getting ready for work. And this was with AM (Amplitude modulation)
and often with self built rigs. A few years later 20 m was dead.
(Sunspot cycle!).
Also operating at 5 megahertz military reserve frequency we sometimes
could transmit/receive hundreds of miles but not 40 miles to another
unit. It's radio!
Have fun.

935. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-30 20:35:24 UTC
From: JB <nospam@goofball.net>
Message-ID: <guncm.1758$646.1504@nwrddc01.gnilink.net>
Source record: 2538

> >> Unless you buy one of those illegal amps on eBay ;)
> >
> > I was the one who suggested he get a CB in the first place. It was not
to
> > give him range, it was because it is more likely if he needs assistance
> > someone nearby will be listening on one.
> >
> > That's also why I suggested he join an off-roader's club and use
whatever
> > radios they do.
> >
> > Geoff.
> >
> >
> I understand. Yes, sadly, that is probably true nowadays. Calls on
> most any 2M repeater in the USA go mostly unanswered, so if you need
> some sort of assitance, CB may be the way to go. However, I applaud the
> original poster on wanting to get a ham license regardless of whether it
> would be the most practical route for him to take in his quest...for
> times when he is not biking or whatever, he can chat with folks in any
> of the four corners of the world (and actually, he CAN do it, even while
> biking!) :)
>
> Scott
> N0EDV

Even with one of those illegal amps, you are still limited to the whim of the ionosphere and absorption of the groundwave. Especially if you are stuck on 27 Mc.

True about 2m. You never know where the repeaters are, what the frequency and PL are, or if everybody is at work. At least on $0 and 80 you can always find retired old codgers. The 440 or 1.2 guy might have his radio right there in the shop or in the office and you can get a stern warning if you disturb his private remote.

But CB might at least allow you to scope out where the hookers and drugs can be found.

936. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-31 00:11:10 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <1YednfjkocIDq-_XnZ2dnUVZ_sGdnZ2d@web-ster.com>
Source record: 2539

On Wed, 29 Jul 2009 10:20:55 +0000, Scott wrote:

> acannell@wwc.com wrote:
>> Thank you for all your excellent and useful responses!
>>
>> To clarify my purpose:
>>
>> 1- I've been waiting for an excuse to get into Ham radio. I'm very
>> interested in learning RF circuitry (Experimental Methods in RF Design
>> is enroute as we speak), and this is a perfect opportunity, because I
>> actually need it! So Im up for getting a license.
>>
>> 2- The purpose of the radio is for emergency and for the cool factor of
>> being able to talk to home from 100+ miles away in the desert and tell
>> them about all the sand and rocks i see. Exciting for them!
>>
>> 3- The CB does sound better for emergency. So now, lets change the
>> purpose of the ham radio to just "cool of taking to home 100+ miles
>> away". And I will get a CB for emergency.
>>
>> I had been leaning toward 20 meters since it has been described
>> everywhere as the DX band of choice. Now I see that it may not work
>> well so "close" as 100 miles. But wouldnt 80 meters have even more of a
>> problem? I am still not clear on which band to use...maybe some more
>> help please?
>>
>>
> Get a modern solid state radio that covers all HF ham bands and an
> antenna such as the "Outbacker" or "Screwdriver" so that you have one
> mobile antenna capable of being tuned to any HF band. I would say that
> 40 meters would be one of the better choices during the day but with the
> multiband antenna, you try the different bands until you find the one
> that works at the time you try calling.
>
> Scott
> N0EDV

Yea verily. What I was trying to say, only better stated.

--
http://www.wescottdesign.com

937. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-31 05:37:23 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <75eb9dd1-b9d6-4e75-a298-8e55566725f6@b14g2000yqd.googlegroups.com>
Source record: 2540

Hey OM:

I seen a van on youtube this guy had two dual 4-1000a PA's, and a gas
powered generator in the back. On 20 meters he'd be rocking the world.
Do you think he was running class A? I don't think he was using it to
break pileups.

73 OM
de n8zu

On Jul 30, 6:44 am, Scott <acepilotREM...@bloomer.net> wrote:
> Geoffrey S. Mendelson wrote:
> > Scott wrote:
>
> >> Unless you buy one of those illegal amps on eBay ;)
>
> > I was the one who suggested he get a CB in the first place. It was not to
> > give him range, it was because it is more likely if he needs assistance
> > someone nearby will be listening on one.

> > Geoff.
>
> I understand. Yes, sadly, that is probably true nowadays. Calls on
> most any 2M repeater in the USA go mostly unanswered, so if you need
> some sort of assitance, CB may be the way to go.
>
> Scott
> N0EDV

938. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-31 11:11:42 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <Saydnd61CfzzTO_XnZ2dnUVZ_tGdnZ2d@bright.net>
Source record: 2541

JB wrote:

>
> But CB might at least allow you to scope out where the hookers and drugs can
> be found.
>
>

Oops, forgot about that aspect! It looks like you get more bang for the
buck with CB (no pun intended) ;)

All kidding aside, I still encourage the op to get a license and get on
the bands. It can be relaxing to yack on the radio when you're NOT out
biking or doing other things...

Scott
N0EDV

939. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-07-31 11:17:36 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <TOKdnXyOl_tMT-_XnZ2dnUVZ_jmdnZ2d@bright.net>
Source record: 2542

raypsi wrote:
> Hey OM:
>
> I seen a van on youtube this guy had two dual 4-1000a PA's, and a gas
> powered generator in the back. On 20 meters he'd be rocking the world.
> Do you think he was running class A? I don't think he was using it to
> break pileups.
>
> 73 OM
> de n8zu

>

A PAIR of 4-1000A's? HOLY CRAP, BATMAN!! I'd be surprised if he didn't melt the sides and roof off on the van :) Do you have a link to the video on youtube? I'd like to see that ;)

Scott
N0EDV

940. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-01 01:23:06 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <990ecc73-31da-4201-a43f-2e1428e36258@v37g2000prg.googlegroups.com>
Source record: 2543

Hey OM

I am still tryin to cobble together a 4-1000a PA I first did my
research googled the heck out of 4-1000a. By golly there is a tonne of
stuff out there. I'm sure I found it while googling google video.

My base station would have frequency hopping beacons on all HF bands,
so I could tell what the best frequency is to use. I would always get
an update of the MUF off the internet. Along with any solar activity,
the solar flux, A and K indices, sun spots are down so you won't have
to worry about those for about 5 more years.

You just can't do that with a single band that's only a few Khz wide

Maybe he should go VLF like the bubble heads do and use D star digital
on VLF band. With a big bug catcher basket wound coil on VLF would
look like a cooling tower on a van.

73 OM
de n8zu

On Jul 31, 7:17 am, Scott <acepilotREM...@bloomer.net> wrote:
> raypsi wrote:
> > Hey OM:
>
> > I seen a van on youtube this guy had two dual 4-1000a PA's, and a gas
> > powered generator in the back. On 20 meters he'd be rocking the world.
> > Do you think he was running class A? I don't think he was using it to
> > break pileups.
>
> > 73 OM
> > de n8zu
>
> A PAIR of 4-1000A's? HOLY CRAP, BATMAN!! I'd be surprised if he didn't
>   melt the sides and roof off on the van :) Do you have a link to the
> video on youtube? I'd like to see that ;)
>
> Scott
> N0EDV

941. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-01 06:00:03 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1249106400@panix.com>
Source record: 2544
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

942. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-01 19:07:52 UTC
From: JB <nospam@goofball.net>
Message-ID: <co0dm.141$nh2.44@nwrddc02.gnilink.net>
Source record: 2545

I find a set of 811As to be quite efficient and useful on occasion. I have no need of hundreds of people calling me in frustration who are 3 s-units below the noise floor.

943. home brew toroid winding machine

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-02 02:13:19 UTC
From: Kenneth Scharf <wa2mze@bellsouth.net>
Message-ID: <h52smqcna1@news.eternal-september.org>
Source record: 2546

This has got to be one of the most original bits of home brew art I've
ever seen!

http://waterfuelcell.org/phpBB2/viewtopic.php?t=1034&postdays=0&postorder=asc&&start=0

Has anybody out there ever tried something like this? I wish I could
figure out how to scale this down to wind smaller toroids.

BTW there is a commercial toroid winder on ebay right now, starting bid
is $99 that will wind most toroid sizes useful for ham projects.

944. So do you chaps

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-03 10:45:20 UTC
From: helptheaged@oldies.com
Message-ID: <8dzdm.9031$Kh7.8780@newsfe03.ams2>
Source record: 2547

So you chaps enjoy siting round drinking brew's
and listening to the radio all day?
Its a good way to get through the 'so called' summer hollidays.
I like uk radio 4, its a grand station. It has plays , book readings and
radio documentaries, loads better than that strange 'beat' music I don't
understand.
Anyhow good on you chaps, you sit back have a brew and enjoy the radio.

945. Re: home brew toroid winding machine

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-03 15:18:38 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <fd589c29-8082-4685-8c67-bbdaa7d49548@k13g2000prh.googlegroups.com>
Source record: 2548

On Aug 1, 10:13 pm, Kenneth Scharf <wa2...@bellsouth.net> wrote:
> This has got to be one of the most original bits of home brew art I've
> ever seen!
>
> http://waterfuelcell.org/phpBB2/viewtopic.php?t=1034&postdays=0&posto...
>
> Has anybody out there ever tried something like this? I wish I could
> figure out how to scale this down to wind smaller toroids.
>
> BTW there is a commercial toroid winder on ebay right now, starting bid
> is $99 that will wind most toroid sizes useful for ham projects.

Hey OM

Guess your link is broken.
Yeah being able to wind 4 AWG solid wire on a toroid would be nice.

73 OM
de n8zu

946. Re: home brew toroid winding machine

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-03 18:15:14 UTC
From: Kenneth Scharf <wa2mze@bellsouth.net>
Message-ID: <h579seoag1@news.eternal-september.org>
Source record: 2549

raypsi wrote:
> On Aug 1, 10:13 pm, Kenneth Scharf <wa2...@bellsouth.net> wrote:
>> This has got to be one of the most original bits of home brew art I've
>> ever seen!
>>
>> http://waterfuelcell.org/phpBB2/viewtopic.php?t=1034&postdays=0&posto...
>>
>> Has anybody out there ever tried something like this? I wish I could
>> figure out how to scale this down to wind smaller toroids.
>>
>> BTW there is a commercial toroid winder on ebay right now, starting bid
>> is $99 that will wind most toroid sizes useful for ham projects.
>
> Hey OM
>
> Guess your link is broken.
> Yeah being able to wind 4 AWG solid wire on a toroid would be nice.
>
> 73 OM
> de n8zu
I just tried the link and it connected.
Or you can google for 'home made toroid winding machine'

947. Re: So do you chaps

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-03 18:25:25 UTC
From: Eddy Grant <Eddy.Grant_NOSPAM@hotmail.com>
Message-ID: <pYFdm.10689$U5.138363@newsb.telia.net>
Source record: 2550

> So you chaps enjoy siting round drinking brew's
> and listening to the radio all day?
> Its a good way to get through the 'so called' summer hollidays.
> I like uk radio 4, its a grand station. It has plays , book readings and
> radio documentaries, loads better than that strange 'beat' music I don't
> understand.
> Anyhow good on you chaps, you sit back have a brew and enjoy the radio.

I wondered what the radio bit was - there are an awful
lot of radio topics. I thought this was a newsgroup for
amateur brewers, like me, who make their own beer and
wines and stuff.

I make wine, mead, and also a little vodka, but better
not shout too loundly about that ;-) I am willing to share
recipes, if anyone is interested.

948. Re: home brew toroid winding machine

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-04 11:39:32 UTC
From: highlandham <rfburns@nospam.com>
Message-ID: <XrGdnejlIlFogOXXnZ2dnUVZ8h5i4p2d@pipex.net>
Source record: 2351

Kenneth Scharf wrote:
> This has got to be one of the most original bits of home brew art I've
> ever seen!
>
> http://waterfuelcell.org/phpBB2/viewtopic.php?t=1034&postdays=0&postorder=asc&&start=0
>
>
> Has anybody out there ever tried something like this? I wish I could
> figure out how to scale this down to wind smaller toroids.
>
> BTW there is a commercial toroid winder on ebay right now, starting bid
> is $99 that will wind most toroid sizes useful for ham projects.
==========
The above reference leads to a very interesting 'general electronics'
home brew site .

Thanks

Frank GM0CSZ / KN6WH

949. Re: So do you chaps

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-04 18:25:11 UTC
From: Paul P <"REMOVE paul"@REMOVE>
Message-ID: <b2%dm.545$nh2.409@nwrddc02.gnilink.net>
Source record: 2352

This board is for those who enjoy the art of putting together electronic
things by hand. BUT I can see (taste) the synergies :~)
I wish I was allow to drink, not religious reasons but docs orders :~(

Can you make/convert those recipes non alcoholic???

Paul P.

<helptheaged@oldies.com> wrote in message
news:8dzdm.9031$Kh7.8780@newsfe03.ams2...
> So you chaps enjoy siting round drinking brew's
> and listening to the radio all day?
> Its a good way to get through the 'so called' summer hollidays.
> I like uk radio 4, its a grand station. It has plays , book readings and
> radio documentaries, loads better than that strange 'beat' music I don't
> understand.
> Anyhow good on you chaps, you sit back have a brew and enjoy the radio.

950. Re: So do you chaps

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-05 17:16:14 UTC
From: Eddy Grant <Eddy.Grant_NOSPAM@hotmail.com>
Message-ID: <y7jem.10702$U5.138504@newsb.telia.net>
Source record: 2353

"Paul P" <REMOVE paul @ REMOVE ppinyot . REMOVEcom> wrote in message
news:b2%dm.545$nh2.409@nwrddc02.gnilink.net...
> This board is for those who enjoy the art of putting together electronic
> things by hand. BUT I can see (taste) the synergies :~)
> I wish I was allow to drink, not religious reasons but docs orders :~(
>
> Can you make/convert those recipes non alcoholic???
>
> Paul P.

Hi Paul,

> This board is for those who enjoy the art of putting together electronic
> things by hand.

So where foes the homebrewing come in?

> I wish I was allow to drink, not religious reasons but docs orders :~(
> Can you make/convert those recipes non alcoholic???

Not really, but a nice wine (12-15%) blended with soda water,
lemon and ice is very pleasant, especially by the pool on these
hot sunny days. The alcohol content is so low (4 - 6%) that
it is like taking a beer, but in smaller quantities.

Johan Binn Chardonay is quite strong in flavour, but only 8.5%
alcohol, which means the drink will have as much alcohol as a
very weak beer.

The tase, however, is like a sparkling wine. Best of both worlds?
Or is that still too much for your doctor?

Regards Eddie

951. Seeking New FAQ/Intro Maintainers for rec.radio.amateur.*

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-07 06:05:01 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/recruitment-1-1249625101@panix.com>
Source record: 2354
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/recruitment
Revision: 1.1 2007/09/29 18:42:47
Posting-Frequency: posted monthly
URL: http://www.faqs.org/faqs/radio/personal-intro/

Changes followed by "|".

The rec.radio.info newsgroup, first established in 1993, has been
recently revived by an active moderation team. We are currently seeking
suitable information, FAQ, and bulletin articles from the entire
rec.radio.* newsgroup hierarchy for simultaneous cross-posting to our
newsgroup.

We are seeking a replacement maintainer for the following information
bulletin formerly posted to rec.radio.amateur.* (and currently archived
at http://www.faqs.org/faqs/radio/personal-intro/ ):

radio/personal-intro
Subject: Guide to the rec.radio Newsgroups
Maintainer: jeffreyh@Hawaii.Edu (Jeffrey Herman)
Last Posted: 9 Nov 2001 06:18:17 GMT
Posting-Frequency: 15th of each month

We are willing to provide any technical support necessary to get this
article updated and automatically posted again at a regular interval.
This would include establishing contact with the original maintainer for
any necessary permissions. We would prefer to seek a new, dedicated
maintainer at this time, rather than start auto-posting the original
article ourselves.

For more information about our newsgroup, see:

http://www.panix.com/~rram/usenet/rri/index.html

Please direct any comments, questions, or criticisms to
rec-radio-info-request@panix.com.
```

952. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-07 21:39:22 UTC
From: Eddy Grant <Eddy.Grant_NOSPAM@hotmail.com>
Message-ID: <ea1fm.10717$U5.138539@newsb.telia.net>
Source record: 2355

Carrier pidgeon is about the only reliable communication
method under those criteria.

<acannell@wwc.com> wrote in message
news:e67c31a6-a42c-4c18-8ec0-a09881e8e418@y10g2000prf.googlegroups.com...
> im an EE, but have never gotten into ham radio. Now, I have a reason!
> Im going off roading in the california desert, and I'd like to be able
> to communicate back home in San Diego. What band and equipment would
> be the best (for both base and mobile) in order to communicate
> reliably during the day? Or is this unreasonable?

953. Re: best setup for vehicle to base communication seperated by 100 to 500 miles?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-09 01:28:16 UTC
From: raypsi <RBorowiak@gmail.com>
Message-ID: <40f3de66-b770-4aa0-a693-54cc8b3a538f@j9g2000prh.googlegroups.com>
Source record: 2356

Hey OM:

From one of my fav sources wiki pedia:
"Carrier pigeons historically carried messages only one way, to their
home."

So if you're mobile you can forget two way communication.
The pigeon sent from your base would never find you in your mobile.

73 OM
de n8zu

On Aug 8, 8:39 am, "Eddy Grant" <Eddy.Grant_NOS...@hotmail.com> wrote:
> Carrier pidgeon is about the only reliable communication
> method under those criteria.
>
> <acann...@wwc.com> wrote in message
>
> news:e67c31a6-a42c-4c18-8ec0-a09881e8e418@y10g2000prf.googlegroups.com...
>
> > im an EE, but have never gotten into ham radio. Now, I have a reason!
> > Im going off roading in the california desert, and I'd like to be able
> > to communicate back home in San Diego. What band and equipment would
> > be the best (for both base and mobile) in order to communicate
> > reliably during the day? Or is this unreasonable?

954. Re: So do you chaps

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-09 04:39:46 UTC
From: Wim Lewis <wiml@hhhh.org>
Message-ID: <h5ljuiguj1@underhill.hhhh.org>
Source record: 2357

In article <y7jem.10702$U5.138504@newsb.telia.net>,
Eddy Grant <Eddy.Grant_NOSPAM@hotmail.com> wrote:
>"Paul P" <REMOVE paul @ REMOVE ppinyot . REMOVEcom> wrote in message
>news:b2%dm.545$nh2.409@nwrddc02.gnilink.net...
>> This board is for those who enjoy the art of putting together electronic
>> things by hand.
>
>So where foes the homebrewing come in?

It's metaphorical, I suppose. On the other hand, brewing beer appeals to
me in much the same way that homebrew electronics does. I only have space
for so many hobbies, though.

Anyway, if you're looking for the drinkable stuff, check out
the rec.crafts.brewing group. I don't know how active it is, but
a quick glance looks like there's some discussion going on.

There's also alt.beer.home-brewing, rec.crafts.distilling,
rec.crafts.winemaking, and rec.crafts.meadmaking. Same caveats. :)

--
Wim Lewis <wiml@hhhh.org>, Seattle, WA, USA. PGP keyID 27F772C1
"We learn from history that we do not learn from history." -Hegel

955. Homebrew 2m (and maybe 70cm) linear (solid state, 20~30W)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-09 11:48:42 UTC
From: Stuart Longland <redhatter@gentoo.org>
Message-ID: <32db5806-63a0-49f0-b481-e634fcc2adec@l5g2000pra.googlegroups.com>
Source record: 2358

[Previously sent to rec.radio.amateur.equipment by mistake... resent here]

Hi all,

I was wondering if anyone knew of a solid state 2m linear amp project that I could build. I'm looking for no more than about 30W. It'll be primarily used for FM, driven from my handheld radio. Bonus points if it can do 70cm too (or at least allow pass-through unattenuated...).

Most of the designs I've seen are for tubes with an output power in the KW-range... my radio license only allows me to transmit 30W FM or 100W SSB... so these are massive overkill (and not desirable for other reasons).

The only project I've seen that fits the bill so far is http://www.falara.org/tektalk/GPOAmp.html which calls for a PCB made with G10 stock. I have no idea where to obtain that here in Brisbane, I have some blank PCB, but have no idea what grade it is, or how much impact on performance using it would have. The MRF1946A is also difficult to source.

Does anyone know of a good project to start on this sort of thing?

Regards,
Stuart Longland (VK4MSL)

956. Re: Homebrew 2m (and maybe 70cm) linear (solid state, 20~30W)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-09 12:58:28 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <4A7EC7F4.6080104@bloomer.net>
Source record: 2359

Stuart Longland wrote:
> [Previously sent to rec.radio.amateur.equipment by mistake... resent
> here]
>
> Hi all,
>
> I was wondering if anyone knew of a solid state 2m linear amp project
> that I could build. I'm looking for no more than about 30W. It'll be
> primarily used for FM, driven from my handheld radio. Bonus points if
> it can do 70cm too (or at least allow pass-through unattenuated...).
>
> Most of the designs I've seen are for tubes with an output power in
> the KW-range... my radio license only allows me to transmit 30W FM or
> 100W SSB... so these are massive overkill (and not desirable for other
> reasons).
>
> The only project I've seen that fits the bill so far is
> http://www.falara.org/tektalk/GPOAmp.html which calls for a PCB made
> with G10 stock. I have no idea where to obtain that here in Brisbane,
> I have some blank PCB, but have no idea what grade it is, or how much
> impact on performance using it would have. The MRF1946A is also
> difficult to source.
>
> Does anyone know of a good project to start on this sort of thing?
>
> Regards,
> Stuart Longland (VK4MSL)

You can homebrew a very simple amp that should meet your specifications...

A generic PC board can be found at http://www.rfparts.com/pcb.html
and I would recommend part number DEM2330. There is a link to "View a
pdf of the DEM2330 Instruction Sheet." You could build everything as
they show in the instruction sheet (which is for a 1300 MHz amp) and
just substitute the RF module with the Mitsubishi RA30H1317M module for
2M or the RA30H4045MR for 70cm. The data sheets for the modules are at
http://www.rfparts.com/module_sau-sav.html#ra and there are also more
module choices there. Both modules specify an input power of 50 mW
maximum, so you would need an attenuator (pi type is easily done by
cutting a break in the input lead on the circuit board and installing
the correct resistors around the cut). If you have 1.5W from the HT,
you would need about 16 dB of attenuation. You would need a pair of RF
relays, one at the input and one at the output to route TX signals
through the amp on TX and bypass around the amp during RX.

Good luck with the project!

73,
Scott
N0EDV

957. Need data sheet for 811 tube

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-09 17:07:09 UTC
From: Kenneth Scharf <wa2mze@bellsouth.net>
Message-ID: <h5n059$p73$1@news.eternal-september.org>
Source record: 2360

Does anybody have a link to a scan of an old data sheet for the 811 (NOT 811A) tube? All I seem to find are 811A spec's. I have the two line blub on the older 811 in an old ARRL HB, but I'd like to get the complete spec sheet. This tube existed in the gap between the TT3 and TT4 tube manuals so I can't find it.

958. Re: Need data sheet for 811 tube

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-09 21:17:27 UTC
From: "C.Tuinder" <ctuinder@hotmail.com>
Message-ID: <4a7f3cce@news.x-privat.org>
Source record: 2361

"Kenneth Scharf" <wa2mze@bellsouth.net> schreef in bericht
news:h5n059$p73$1@news.eternal-september.org...
> Does anybody have a link to a scan of an old data sheet for the 811 (NOT
> 811A) tube? All I seem to find are 811A spec's. I have the two line
> blub on the older 811 in an old ARRL HB, but I'd like to get the
> complete spec sheet. This tube existed in the gap between the TT3 and
> TT4 tube manuals so I can't find it.

Here we go:
http://sarris.info/main/files/SV811-10.pdf

Regards and 73

Carel
PA3DZI / OM

959. Re: Homebrew 2m (and maybe 70cm) linear (solid state, 20~30W)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-09 22:26:46 UTC
From: Stuart Longland <redhatter@gentoo.org>
Message-ID: <8b0a7423-edb8-424b-a31f-50821bdf80ac@a39g2000pre.googlegroups.com>
Source record: 2362

On Aug 9, 10:58 pm, Scott <acepilotREM...@bloomer.net> wrote:
> You can homebrew a very simple amp that should meet your specifications...
>
> A generic PC board can be found athttp://www.rfparts.com/pcb.html
> and I would recommend part number DEM2330. There is a link to "View a
> pdf of the DEM2330 Instruction Sheet." You could build everything as
> they show in the instruction sheet (which is for a 1300 MHz amp) and
> just substitute the RF module with the Mitsubishi RA30H1317M module for
> 2M or the RA30H4045MR for 70cm. The data sheets for the modules are
athttp://www.rfparts.com/module_sau-sav.html#raand there are also more
> module choices there.

Ahh right... I had a look around, looks like Minikits[1] sell the
power modules (and even a PCB). This looks promising.

> Both modules specify an input power of 50 mW
> maximum, so you would need an attenuator (pi type is easily done by
> cutting a break in the input lead on the circuit board and installing
> the correct resistors around the cut). If you have 1.5W from the HT,
> you would need about 16 dB of attenuation.

The handheld can be wound right back to 50mW when running off
batteries... otherwise 0.5W. A pi network isn't hard though. That
said... I won't make the mistake I made last time -- last time I tried
making it with 5W wire wound resistors... and wondered why it didn't
work.

I shall do some further investigation.

Thanks.

Stuart Longland VK4MSL
1. http://www.minikits.com.au/kits2.html

960. Re: Need data sheet for 811 tube

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-09 22:46:17 UTC
From: Kenneth Scharf <wa2mze@bellsouth.net>
Message-ID: <h5nk18$lf5$1@news.eternal-september.org>
Source record: 2363

C.Tuinder wrote:
> "Kenneth Scharf" <wa2mze@bellsouth.net> schreef in bericht
> news:h5n059$p73$1@news.eternal-september.org...
>> Does anybody have a link to a scan of an old data sheet for the 811 (NOT
>> 811A) tube? All I seem to find are 811A spec's. I have the two line
>> blub on the older 811 in an old ARRL HB, but I'd like to get the
>> complete spec sheet. This tube existed in the gap between the TT3 and
>> TT4 tube manuals so I can't find it.
>
> Here we go:
> http://sarris.info/main/files/SV811-10.pdf
>
> Regards and 73
>
> Carel
> PA3DZI / OM
>
>
Thanks, but that's NOT it.
This link goes to the Svetlana sv811-10 which is NOT the same as the
ORIGINAL RCA 811 transmitting tube. Svetlana had no right to call this
bottle an 811 as it does NOT have the plate cap, is NOT a transmitting
tube, and has a mu of 10 not 160!
This is a nice AUDIO tube, more of a replacement for the 300B than an 811!

961. Re: So do you chaps

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-10 07:08:04 UTC
From: Eddy Grant <Eddy.Grant_NOSPAM@hotmail.com>
Message-ID: <oHPfm.10750$U5.138567@newsb.telia.net>
Source record: 2364

>>So where foes the homebrewing come in?
>
> It's metaphorical, I suppose. On the other hand, brewing beer appeals to
> me in much the same way that homebrew electronics does. I only have space
> for so many hobbies, though.

Many thanks, I shall subscribe to it. I understand what you
mean. A bit misleading though. Hope you enjoy your homebrew
electronics.

962. Re: Need data sheet for 811 tube

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-10 15:33:59 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <d2924bc9-f9dd-4d6c-bda7-b3a03c3303a9@e4g2000vbe.googlegroups.com>
Source record: 2365

On Aug 9, 1:07 pm, Kenneth Scharf <wa2...@bellsouth.net> wrote:
> Does anybody have a link to a scan of an old data sheet for the 811 (NOT
> 811A) tube? All I seem to find are 811A spec's. I have the two line
> blub on the older 811 in an old ARRL HB, but I'd like to get the
> complete spec sheet. This tube existed in the gap between the TT3 and
> TT4 tube manuals so I can't find it.

I don't know where to find the datasheet for the 811-non-A, but I did
want to step in and point out that TT3 has the BEST TUBE PORN EVER!.
That picture of the 833 gets me all excited, even today.

Tim.

963. Re: Need data sheet for 811 tube

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-10 16:04:22 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <368c3437-a52d-4e7a-86fa-4a0c70a8607e@m20g2000vbp.googlegroups.com>
Source record: 2366

On Aug 9, 6:46 pm, Kenneth Scharf <wa2...@bellsouth.net> wrote:
> This link goes to the Svetlana sv811-10 which is NOT the same as the
> ORIGINAL RCA 811 transmitting tube. Svetlana had no right to call this
> bottle an 811 as it does NOT have the plate cap, is NOT a transmitting
> tube, and has a mu of 10 not 160!
> This is a nice AUDIO tube, more of a replacement for the 300B than an 811!

Actually, the 811 was sold by RCA as the "audio tube"; they sold the
similar but not identical 812 as the RF tube. The beauty of the 811 as
a push-pull class B modulator is the low parts count and you don't
need any bias supply.

It was only in the 1950's with the advent of SSB that the simplicity
and excellent characteristics of the zero bias triode became clear in
RF linear amplifier service. Before that everyone ran all their RF
stages in class C for efficiency. It was the 30L1 in 1960, and some
hams experimenting with zero bias in the 50's, that placed the 811A in
the RF tube category. RCA of course was more than happy to sell the
tubes for whatever purpose :-).

Oh, here's a 811 (non-A) datasheet from HB3:
http://www.pmillett.com/tubedata/HB-3/Transmitting_Tubes/811.pdf

Good reading that mentions 811 marketing, and the advent of zero bias
triodes for SSB linears, is in the 1996 QST article: "811A:
Grandfather of the zero bias revolution". It notes that the main
difference between the 811A and the non-A, was the addition of extra
fin area in the 811A to boost dissipation.

Tim.

964. Re: Homebrew 2m (and maybe 70cm) linear (solid state, 20~30W)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-10 16:41:08 UTC
From: Rob <nomail@example.com>
Message-ID: <slrnh80jd3.2pl2.nomail@xs7.xs4all.nl>
Source record: 2367

Stuart Longland <redhatter@gentoo.org> wrote:
> Ahh right... I had a look around, looks like Minikits[1] sell the
> power modules (and even a PCB). This looks promising.

Maybe with some more searching you can find PCBs that include the tx/rx
switching, preferably with PIN diodes. That will save you a lot of
money and construction effort.
(with a bare amplifier PCB as shown on that site, you will need relays
and a circuit to drive them when transmitting, in addition to the
amplifier PCB)

> The handheld can be wound right back to 50mW when running off
> batteries... otherwise 0.5W. A pi network isn't hard though. That
> said... I won't make the mistake I made last time -- last time I tried
> making it with 5W wire wound resistors... and wondered why it didn't
> work.

It is better not to rely solely on lowpower settings of the handheld,
as sooner or later you'll forget to set it to lowpower, it will drive
5W into the module, and destroy it.
So it is best to have some attenuation in front of the module, such that
it will survive accidental input of the full power of the handheld.
You can then still use lower power in normal use, so the handheld will
not run too hot. Find the maximum allowable input power for the module
and design the pi network so it will attenuate the highest output power
of the handheld sufficiently. Then calculate the nominal power to
the module (for driving it to e.g. 90% of its max output) and use the
handheld at that power level. That could be 0.5 W or so.

965. Re: Homebrew 2m (and maybe 70cm) linear (solid state, 20~30W)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-10 20:48:27 UTC
From: Robert Cherry <Robert.Cherry.4c650e6@radiobanter.com>
Message-ID: <Robert.Cherry.4c650e6@radiobanter.com>
Source record: 2368

Stuart Longland;685473 Wrote:
> [Previously sent to rec.radio.amateur.equipment by mistake... resent
> here]
>
> Hi all,
>
> I was wondering if anyone knew of a solid state 2m linear amp project
> that I could build. I'm looking for no more than about 30W. It'll be
> primarily used for FM, driven from my handheld radio. Bonus points if
> it can do 70cm too (or at least allow pass-through unattenuated...).
>
> Most of the designs I've seen are for tubes with an output power in
> the KW-range... my radio license only allows me to transmit 30W FM or
> 100W SSB... so these are massive overkill (and not desirable for other
> reasons).
>
> The only project I've seen that fits the bill so far is
> http://www.falara.org/tektalk/GPOAmp.html which calls for a PCB made
> with G10 stock. I have no idea where to obtain that here in Brisbane,
> I have some blank PCB, but have no idea what grade it is, or how much
> impact on performance using it would have. The MRF1946A is also
> difficult to source.
>
> Does anyone know of a good project to start on this sort of thing?
>
> Regards,
> Stuart Longland (VK4MSL)

Stuart,

Unless you absolutely want the experience of building, you may (I don't know the situation in Australia) be able to find a used mobile 2m or 2m/70cm tranceiver for a reasonable price. My used Yaesu FT-2800M cost me 100 Canadian dollars. I had been thinking of buying an amp for my HT but discovered it is easier to simply buy a transceiver that gives me 25 watts along with 3 other power choices.

I hope the suggestion helps.

Robert VE2AGE
Gatineau, Quebec
Canada

--
Robert Cherry

966. Re: Homebrew 2m (and maybe 70cm) linear (solid state, 20~30W)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-11 14:01:51 UTC
From: Bob Spooner <rls19@psu.edu>
Message-ID: <h5rtkf$ec56$1@tr22n12.aset.psu.edu>
Source record: 2369

"Robert Cherry" <Robert.Cherry.4c650e6@radiobanter.com> wrote in message
news:Robert.Cherry.4c650e6@radiobanter.com...
>
> Stuart Longland;685473 Wrote:
>> [Previously sent to rec.radio.amateur.equipment by mistake... resent
>> here]
>>
>> Hi all,
>>
>> I was wondering if anyone knew of a solid state 2m linear amp project
>> that I could build. I'm looking for no more than about 30W. It'll be
>> primarily used for FM, driven from my handheld radio. Bonus points if
>> it can do 70cm too (or at least allow pass-through unattenuated...).
>>
>> Most of the designs I've seen are for tubes with an output power in
>> the KW-range... my radio license only allows me to transmit 30W FM or
>> 100W SSB... so these are massive overkill (and not desirable for other
>> reasons).
>>
>> The only project I've seen that fits the bill so far is
>> http://www.falara.org/tektalk/GPOAmp.html which calls for a PCB made
>> with G10 stock. I have no idea where to obtain that here in Brisbane,
>> I have some blank PCB, but have no idea what grade it is, or how much
>> impact on performance using it would have. The MRF1946A is also
>> difficult to source.
>>
>> Does anyone know of a good project to start on this sort of thing?
>>
>> Regards,
>> Stuart Longland (VK4MSL)
>
> Stuart,
>
> Unless you absolutely want the experience of building, you may (I don't
> know the situation in Australia) be able to find a used mobile 2m or
> 2m/70cm tranceiver for a reasonable price. My used Yaesu FT-2800M cost
> me 100 Canadian dollars. I had been thinking of buying an amp for my HT
> but discovered it is easier to simply buy a transceiver that gives me 25
> watts along with 3 other power choices.
>
> I hope the suggestion helps.
>
> Robert VE2AGE
> Gatineau, Quebec

> Canada
>
>
>
>
> --
> Robert Cherry

Yes, and the transceiver will give you an additional advantage over your handheld - better dynamic range on receive because the filtering is better because there's more space for good filters.
73,
Bob AD3K

967. Re: Homebrew 2m (and maybe 70cm) linear (solid state, 20~30W)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-11 16:22:11 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <B7ednZd_vPUuBxzXnZ2dnUVZ_oti4p2d@web-ster.com>
Source record: 2370

On Mon, 10 Aug 2009 21:48:27 +0100, Robert Cherry wrote:

> Stuart Longland;685473 Wrote:
>> [Previously sent to rec.radio.amateur.equipment by mistake... resent
>> here]
>>
>> Hi all,
>>
>> I was wondering if anyone knew of a solid state 2m linear amp project
>> that I could build. I'm looking for no more than about 30W. It'll be
>> primarily used for FM, driven from my handheld radio. Bonus points if
>> it can do 70cm too (or at least allow pass-through unattenuated...).
>>
>> Most of the designs I've seen are for tubes with an output power in the
>> KW-range... my radio license only allows me to transmit 30W FM or 100W
>> SSB... so these are massive overkill (and not desirable for other
>> reasons).
>>
>> The only project I've seen that fits the bill so far is
>> http://www.falara.org/tektalk/GPOAmp.html which calls for a PCB made
>> with G10 stock. I have no idea where to obtain that here in Brisbane,
>> I have some blank PCB, but have no idea what grade it is, or how much
>> impact on performance using it would have. The MRF1946A is also
>> difficult to source.
>>
>> Does anyone know of a good project to start on this sort of thing?
>>
>> Regards,
>> Stuart Longland (VK4MSL)
>
> Stuart,
>
> Unless you absolutely want the experience of building, you may (I don't
> know the situation in Australia) be able to find a used mobile 2m or
> 2m/70cm tranceiver for a reasonable price. My used Yaesu FT-2800M cost
> me 100 Canadian dollars. I had been thinking of buying an amp for my HT
> but discovered it is easier to simply buy a transceiver that gives me 25
> watts along with 3 other power choices.
>
> I hope the suggestion helps.
>
> Robert VE2AGE
> Gatineau, Quebec
> Canada

Oh how boring (correct, but boring).

--
www.wescottdesign.com

968. Re: Homebrew 2m (and maybe 70cm) linear (solid state, 20~30W)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-11 16:24:07 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <B7ednZZ_vPW6BhzXnZ2dnUVZ_ov_fwAA@web-ster.com>
Source record: 2371

On Mon, 10 Aug 2009 16:41:08 +0000, Rob wrote:

> Stuart Longland <redhatter@gentoo.org> wrote:
>> Ahh right... I had a look around, looks like Minikits[1] sell the power
>> modules (and even a PCB). This looks promising.
>
> Maybe with some more searching you can find PCBs that include the tx/rx
> switching, preferably with PIN diodes. That will save you a lot of
> money and construction effort.
> (with a bare amplifier PCB as shown on that site, you will need relays
> and a circuit to drive them when transmitting, in addition to the
> amplifier PCB)
>
>> The handheld can be wound right back to 50mW when running off
>> batteries... otherwise 0.5W. A pi network isn't hard though. That
>> said... I won't make the mistake I made last time -- last time I tried
>> making it with 5W wire wound resistors... and wondered why it didn't
>> work.
>
> It is better not to rely solely on lowpower settings of the handheld, as
> sooner or later you'll forget to set it to lowpower, it will drive 5W
> into the module, and destroy it.
> So it is best to have some attenuation in front of the module, such that
> it will survive accidental input of the full power of the handheld. You
> can then still use lower power in normal use, so the handheld will not
> run too hot. Find the maximum allowable input power for the module and
> design the pi network so it will attenuate the highest output power of
> the handheld sufficiently. Then calculate the nominal power to the
> module (for driving it to e.g. 90% of its max output) and use the
> handheld at that power level. That could be 0.5 W or so.

If one were very clever one may be able to make the last leg of the
attenuator a pair of back-to-back diodes that would clip at a moderately
low level, protecting the module while still allowing it to work when you
_do_ set the radio to low power.

I'd have to work through the details to see if it's feasible, but it sure
sounds cool.

--
www.wescottdesign.com

969. Re: Homebrew 2m (and maybe 70cm) linear (solid state, 20~30W)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-11 20:05:28 UTC
From: Rob <nomail@example.com>
Message-ID: <slrnh83jo8.pnj.nomail@xs7.xs4all.nl>
Source record: 2372

Tim Wescott <tim@seemywebsite.com> wrote:
> If one were very clever one may be able to make the last leg of the
> attenuator a pair of back-to-back diodes that would clip at a moderately
> low level, protecting the module while still allowing it to work when you
> _do_ set the radio to low power.

I don't think it is a good idea to have a signal clipped by diodes,
then amplified by a wideband amplifier and fed into a transmitting antenna.
But hey, to each his likings!

970. Re: Homebrew 2m (and maybe 70cm) linear (solid state, 20~30W)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-12 11:14:36 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <rvOdnTEL54iBOR_XnZ2dnUVZ_qZi4p2d@bright.net>
Source record: 2373

Tim Wescott wrote:

>
> If one were very clever one may be able to make the last leg of the
> attenuator a pair of back-to-back diodes that would clip at a moderately
> low level, protecting the module while still allowing it to work when you
> _do_ set the radio to low power.
>
> I'd have to work through the details to see if it's feasible, but it sure
> sounds cool.
>

You mean like a pin diode attenuator controlled by a sort of ALC? ;)

Scott
N0EDV

971. Re: Homebrew 2m (and maybe 70cm) linear (solid state, 20~30W)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-12 11:15:33 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <rvOdnTAL54jIOR_XnZ2dnUVZ_qZi4p2d@bright.net>
Source record: 2374

Rob wrote:
> Tim Wescott <tim@seemywebsite.com> wrote:
>> If one were very clever one may be able to make the last leg of the
>> attenuator a pair of back-to-back diodes that would clip at a moderately
>> low level, protecting the module while still allowing it to work when you
>> _do_ set the radio to low power.
>
> I don't think it is a good idea to have a signal clipped by diodes,
> then amplified by a wideband amplifier and fed into a transmitting antenna.
> But hey, to each his likings!

...And wallet size if FCC attention is grabbed ;)

972. Re: Need data sheet for 811 tube

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-12 19:26:28 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <344f3527-8788-47a8-b400-71dfc14b3262@f37g2000yqn.googlegroups.com>
Source record: 2375

On Aug 10, 12:04 pm, Tim Shoppa <sho...@trailing-edge.com> wrote:
> On Aug 9, 6:46 pm, Kenneth Scharf <wa2...@bellsouth.net> wrote:
>
> > This link goes to the Svetlana sv811-10 which is NOT the same as the
> > ORIGINAL RCA 811 transmitting tube. Svetlana had no right to call this
> > bottle an 811 as it does NOT have the plate cap, is NOT a transmitting
> > tube, and has a mu of 10 not 160!
> > This is a nice AUDIO tube, more of a replacement for the 300B than an 811!
>
> Actually, the 811 was sold by RCA as the "audio tube"; they sold the
> similar but not identical 812 as the RF tube. The beauty of the 811 as
> a push-pull class B modulator is the low parts count and you don't
> need any bias supply.
>
> It was only in the 1950's with the advent of SSB that the simplicity
> and excellent characteristics of the zero bias triode became clear in
> RF linear amplifier service. Before that everyone ran all their RF
> stages in class C for efficiency. It was the 30L1 in 1960, and some
> hams experimenting with zero bias in the 50's, that placed the 811A in
> the RF tube category. RCA of course was more than happy to sell the
> tubes for whatever purpose :-).
>
> Oh, here's a 811 (non-A) datasheet from
HB3:http://www.pmillett.com/tubedata/HB-3/Transmitting_Tubes/811.pdf
>
> Good reading that mentions 811 marketing, and the advent of zero bias
> triodes for SSB linears, is in the 1996 QST article: "811A:
> Grandfather of the zero bias revolution". It notes that the main
> difference between the 811A and the non-A, was the addition of extra
> fin area in the 811A to boost dissipation.
>
> Tim.

pmillet has a lot of old tube books for free download

Jimmie

973. Re: So do you chaps

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-13 14:13:22 UTC
From: kb9rqz <kb9rqz@puncegotcha.com>
Message-ID: <4a841f9b@x-privat.org>
Source record: 2376

<helptheaged@oldies.com> wrote in message
news:8dzdm.9031$Kh7.8780@newsfe03.ams2...
> So you chaps enjoy siting round drinking brew's
> and listening to the radio all day?
> Its a good way to get through the 'so called' summer hollidays.
> I like uk radio 4, its a grand station. It has plays , book readings and
> radio documentaries, loads better than that strange 'beat' music I don't
> understand.
> Anyhow good on you chaps, you sit back have a brew and enjoy the radio.
indeed

974. techical note from the kosher ham

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-13 16:15:06 UTC
From: kb9rqz <kb9rqz@puncegotcha.com>
Message-ID: <4a843c1f$1@x-privat.org>
Source record: 2377

tip and tick I hope folks wills find usefull

http://techkb9rqz.blogspot.com/

975. Re: Need data sheet for 811 tube

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-13 20:31:31 UTC
From: kb9rqz <kb9rqz@puncegotcha.com>
Message-ID: <4a847839$1@x-privat.org>
Source record: 2378
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message
news:d2924bc9-f9dd-4d6c-bda7-b3a03c3303a9@e4g2000vbe.googlegroups.com...
On Aug 9, 1:07 pm, Kenneth Scharf <wa2...@bellsouth.net> wrote:
> Does anybody have a link to a scan of an old data sheet for the 811 (NOT
> 811A) tube? All I seem to find are 811A spec's. I have the two line
> blub on the older 811 in an old ARRL HB, but I'd like to get the
> complete spec sheet. This tube existed in the gap between the TT3 and
> TT4 tube manuals so I can't find it.

I don't know where to find the datasheet for the 811-non-A, but I did
want to step in and point out that TT3 has the BEST SHEMALE TUBE PORN EVER!.
That picture of the 833 gets me all excited, even today.

Mrak i punce mrogan
http://ipunce.blogspot.com/

976. get kelp

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-13 23:48:58 UTC
From: kb9rqz <mark@kb9rqz.com>
Message-ID: <538d6cbc-1608-497e-abc8-7cf4a9ee4f8e@d21g2000vbm.googlegroups.com>
Source record: 2379
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Aug 13, 4:31 pm, "kb9rqz" <kb9...@puncegotcha.com> wrote:
> "
fake

977. test

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-14 20:49:42 UTC
From: Tubal Cain <Tubalcain@uk.radio.amateur>
Message-ID: <L5khm.120538$zh1.14591@newsfe04.ams2>
Source record: 2380

[No readable article body recovered]

978. Re: Need data sheet for 811 tube

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-15 19:02:49 UTC
From: Kenneth Scharf <wa2mze@bellsouth.net>
Message-ID: <h670mh$9lh$1@news.eternal-september.org>
Source record: 2381

Tim Shoppa wrote:
> On Aug 9, 6:46 pm, Kenneth Scharf <wa2...@bellsouth.net> wrote:
>> This link goes to the Svetlana sv811-10 which is NOT the same as the
>> ORIGINAL RCA 811 transmitting tube. Svetlana had no right to call this
>> bottle an 811 as it does NOT have the plate cap, is NOT a transmitting
>> tube, and has a mu of 10 not 160!
>> This is a nice AUDIO tube, more of a replacement for the 300B than an 811!
>
> Actually, the 811 was sold by RCA as the "audio tube"; they sold the
> similar but not identical 812 as the RF tube. The beauty of the 811 as
> a push-pull class B modulator is the low parts count and you don't
> need any bias supply.
>
> It was only in the 1950's with the advent of SSB that the simplicity
> and excellent characteristics of the zero bias triode became clear in
> RF linear amplifier service. Before that everyone ran all their RF
> stages in class C for efficiency. It was the 30L1 in 1960, and some
> hams experimenting with zero bias in the 50's, that placed the 811A in
> the RF tube category. RCA of course was more than happy to sell the
> tubes for whatever purpose :-).
>
> Oh, here's a 811 (non-A) datasheet from HB3:
> http://www.pmillett.com/tubedata/HB-3/Transmitting_Tubes/811.pdf
>
> Good reading that mentions 811 marketing, and the advent of zero bias
> triodes for SSB linears, is in the 1996 QST article: "811A:
> Grandfather of the zero bias revolution". It notes that the main
> difference between the 811A and the non-A, was the addition of extra
> fin area in the 811A to boost dissipation.
>
> Tim.
Thanks! That's the one.
While it is true that the 811 was originally intended for use as an
audio tube in modulators RCA also published spec's on using it as an RF
final. May hams used the same tube type in both places so as to only
keep one tube type for spares. Audiophools today probably search for
812's for use in single ended class A amps.

979. RCA COS/MOS Integrated Circuit Databook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-16 01:28:14 UTC
From: Giga News <kc8ldo@arrl.net>
Message-ID: <4MmdnaqrtbUy_RrXnZ2dnUVZ_vWdnZ2d@giganews.com>
Source record: 2382

Does anybody have a link or a scanned copy of the old RCA COS/MOS Integrated Circuit databook for the CD4000A/B series logic chips? I have a whole collection of datasheets for the various chips but I would like to get a copy of the original databook in a machine readable format, PDF or Postscript would be OK. I let a coworker use my copy and somebody stole it off his desk.

73's

Leland C. Scott
KC8LDO

980. Re: Homebrew 2m (and maybe 70cm) linear (solid state, 20~30W)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-16 14:41:03 UTC
From: Stuart Longland <redhatter@gentoo.org>
Message-ID: <3b74518a-cb71-4b5f-a508-59e042e73078@o15g2000yqm.googlegroups.com>
Source record: 2383

Robert Cherry wrote:
> Stuart Longland;685473 Wrote:
> > I was wondering if anyone knew of a solid state 2m linear amp project
> > that I could build. I'm looking for no more than about 30W. It'll be
> > primarily used for FM, driven from my handheld radio. Bonus points if
> > it can do 70cm too (or at least allow pass-through unattenuated...).
>
> Stuart,
>
> Unless you absolutely want the experience of building, you may (I don't
> know the situation in Australia) be able to find a used mobile 2m or
> 2m/70cm tranceiver for a reasonable price. My used Yaesu FT-2800M cost
> me 100 Canadian dollars. I had been thinking of buying an amp for my HT
> but discovered it is easier to simply buy a transceiver that gives me 25
> watts along with 3 other power choices.

This is the ultimate aim... will be to purchase a newer radio. I have my eyes set on a FT-897D, but it'll require quite some saving to acquire the necessary cash.

I would still like to homebrew a linear amp though, as the final stage for homebrew transceivers. This would be something that I'd be looking to do in order to improve my understanding of radiocommunications.

I'm also aware that I need not use a linear amp for FM (or CW/PSK, class-C amps work for these modes), but since the homebrewing mentioned above may also include AM and SSB, I figure a linear is going to give me much better flexibility.

981. Re: So do you chaps

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-16 15:15:04 UTC
From: Stuart Longland <redhatter@gentoo.org>
Message-ID: <29f4fed1-3f11-49fa-ab3a-e5e620ed18d8@b15g2000yqd.googlegroups.com>
Source record: 2384

helpthea...@oldies.com wrote:
> So you chaps enjoy siting round drinking brew's
> and listening to the radio all day?

Well... there are those who just like drinking alcohol all day,
listening to the radio. There's a certain satisfaction one gets
though, when you've used some mental muscle and elbow grease to home-
manufacture the radio receiver (or transceiver) yourself from basic
components.

There's also a nice feeling when your home brew of alcohol works out
just the way you like it.

Put these two things together... life is good. :-)

Regards,
Stuart Longland (VK4MSL)

982. Re: RCA COS/MOS Integrated Circuit Databook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-16 15:45:32 UTC
From: Kenneth Scharf <wa2mze@bellsouth.net>
Message-ID: <h699ghacc3@news.eternal-september.org>
Source record: 2385

Giga News wrote:
> Does anybody have a link or a scanned copy of the old RCA COS/MOS Integrated
> Circuit databook for the CD4000A/B series logic chips? I have a whole
> collection of datasheets for the various chips but I would like to get a
> copy of the original databook in a machine readable format, PDF or
> Postscript would be OK. I let a coworker use my copy and somebody stole it
> off his desk.
>
> 73's
>
> Leland C. Scott
> KC8LDO
>
>
which year/version? I might have the book, but no time to scan it.

983. Re: RCA COS/MOS Integrated Circuit Databook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-16 17:29:46 UTC
From: Huy Linh Le Nguyen <huylynk@gmail.com>
Message-ID: <e6d221f6-8567-4f04-9a35-343b649512fc@t13g2000yqt.googlegroups.com>
Source record: 2386

thatwaasfas

984. Re: RCA COS/MOS Integrated Circuit Databook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-16 22:23:04 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <yI2dnV96HIhWGxXXnZ2dnUVZ_sKdnZ2d@giganews.com>
Source record: 2387

I had the 1980 version until somebody rip it off.

--
73's

Leland C. Scott
KC8LDO

"Kenneth Scharf" <wa2mze@bellsouth.net> wrote in message
news:h699ghacc3@news.eternal-september.org...
> Giga News wrote:
>> Does anybody have a link or a scanned copy of the old RCA COS/MOS
>> Integrated Circuit databook for the CD4000A/B series logic chips? I have
>> a whole collection of datasheets for the various chips but I would like
>> to get a copy of the original databook in a machine readable format, PDF
>> or Postscript would be OK. I let a coworker use my copy and somebody
>> stole it off his desk.
>>
>> 73's
>>
>> Leland C. Scott
>> KC8LDO
> which year/version? I might have the book, but no time to scan it.

985. Re: Homebrew 2m (and maybe 70cm) linear (solid state, 20~30W)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-16 22:51:37 UTC
From: highlandham <rfburns@nospam.com>
Message-ID: <9PidnX4XoqHmEBXXnZ2dnUVZ8mednZ2d@pipex.net>
Source record: 2388

Stuart Longland wrote:
> snip
> I'm also aware that I need not use a linear amp for FM (or CW/PSK,
> class-C amps work for these modes), but since the homebrewing
> mentioned above may also include AM and SSB, I figure a linear is
> going to give me much better flexibility.
==========
Before considering a RF power amplifier for SSB operation ,get the best possible antenna(s) for the relevant bands .
These will give you even better fexibility .

Frank GM0CSZ / KN6WH

986. design of frequency multiplicator stages

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-19 08:11:09 UTC
From: Claude Frantz <r31dmaeu@unibw.de>
Message-ID: <h6gc2t$p0h$1@news.mixmin.net>
Source record: 2389

Do you known about good articles (or books) about the design of
frequency multiplicator stages using tubes ?

I want to learn about choosing the operation point and the optimal load,
in order to get a good efficiency and a good output power while
reminding in the allowed limits.

Thanks a lot !

Claude

987. Re: design of frequency multiplicator stages

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-19 14:28:37 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <9f47421e-999d-4b94-931a-dbc26c77dc4a@c1g2000yqi.googlegroups.com>
Source record: 2390

On Aug 19, 4:11 am, Claude Frantz <r31dm...@unibw.de> wrote:
> Do you known about good articles (or books) about the design of
> frequency multiplicator stages using tubes ?
>
> I want to learn about choosing the operation point and the optimal load,
> in order to get a good efficiency and a good output power while
> reminding in the allowed limits.
>
> Thanks a lot !

Clarke and Hess, "Communications Circuits Analysis and Design", is a good book about operating points and goes into the math of figuring out what harmonics are produced at an operating point and drive. They also have a very good analysis of mixers. The math isn't heavyweight but is definitely college-level requiring application of calculus and it doesn't hurt to understand Laplace transforms either.

Today you'd probably do a SPICE simulation instead of the Taylor series expansions that Clarke and Hess go through, but it's still very worthwhile to understand what operating point parameters do in terms of harmonics and the book gives insight that simply running simulations won't give you.

In the ham cookbook sense, it is more common to copy a circuit out of a handbook, build it and crank up the input power until you either get the efficiency you expect, or you add another stage to get the power you need. Both the ARRL handbook and Experimental Methods in RF Design go into the sorts of efficiencies expected from different designs.

Most tube multipliers are simply operated in deep class C, with more saturation than might be done for an efficient RF amp.

Tim N3QE

988. Re: RCA COS/MOS Integrated Circuit Databook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-20 00:13:46 UTC
From: Kenneth Scharf <wa2mze@bellsouth.net>
Message-ID: <h6i4d9$f3n$1@news.eternal-september.org>
Source record: 2391

Leland C. Scott wrote:
> I had the 1980 version until somebody rip it off.
>
>
I have the 1977 'cmos/mos integrated circuits' book
and the 1983 'cmos integrated circuits' book.

The 1977 book seems in better shape as it might have
been printed on acid free paper. The newer book is
turning brown, but is still in readable shape.

Lot's of pages, would take too much time to scan it all.
Anything in particular that you need?

989. Re: RCA COS/MOS Integrated Circuit Databook?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-22 06:09:13 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <MLOdnXnS9JoTFhLXnZ2dnUVZ_r6dnZ2d@giganews.com>
Source record: 2392

Kenneth;

Thanks for the offer. I was looking for a complete replacement version in a machine readable format. The person I let use my work copy, and somebody it ripped off from him, was working on a hobby project during his break time; it was absolutely nothing work related.

73's

Leland C. Scott
KC8LDO

"Kenneth Scharf" <wa2mze@bellsouth.net> wrote in message
news:h6i4d9$f3n$1@news.eternal-september.org...
> Leland C. Scott wrote:
>> I had the 1980 version until somebody rip it off.
>>
>>
> I have the 1977 'cmos/mos integrated circuits' book
> and the 1983 'cmos integrated circuits' book.
>
> The 1977 book seems in better shape as it might have
> been printed on acid free paper. The newer book is
> turning brown, but is still in readable shape.
>
> Lot's of pages, would take too much time to scan it all.
> Anything in particular that you need?

990. the home of the kosher ham

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-22 18:57:56 UTC
From: kb9rqz <kb9rqz@puncegotcha.com>
Message-ID: <4a903fc4@x-privat.org>
Source record: 2393
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

http://kb9rqz.blogspot.com/
the core blog of KB9rqz a ham radio that happenens to be Bi sexaul kinky

991. Re: So do you chaps

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-23 20:12:11 UTC
From: stan <tsanford@nf.sympatico.ca>
Message-ID: <f1a2df8d-02d3-4b6f-944b-e42dfecbe4e0@g6g2000vbr.googlegroups.com>
Source record: 2394

On Aug 16, 1:15 pm, Stuart Longland <redhat...@gentoo.org> wrote:
> helpthea...@oldies.com wrote:
> > So you chaps enjoy siting round drinking brew's
> > and listening to the radio all day?
>
> Well... there are those who just like drinking alcohol all day,
> listening to the radio. There's a certain satisfaction one gets
> though, when you've used some mental muscle and elbow grease to home-
> manufacture the radio receiver (or transceiver) yourself from basic
> components.
>
> There's also a nice feeling when your home brew of alcohol works out
> just the way you like it.
>
> Put these two things together... life is good. :-)
>
> Regards,
> Stuart Longland (VK4MSL)

Yup: I made/home-built/constructed/home-brewed, or whatever terms we
want to use, my first radio at around age 13 a few years following
WWII.
That led to a 40 year career in telecomms. Still tinkering! But
haven't built anything new for years.
Sorry but only 'consumption' here, by choice, is a half glass of wine
(not even home-brewed!) with a meal; when offered.
Mash on chaps! Best of luck.

992. Re: the home of the kosher ham

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-24 19:42:11 UTC
From: kb9rqz@yahoooo.com
Message-ID: <a7r595d4aet5biprmi2hopl770hric98kc@4ax.com>
Source record: 2395
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.shortwave

On Sat, 22 Aug 2009 14:57:56 -0400, "kb9rqz" <kb9rqz@puncegotcha.com>
wrote:

>http://kb9rqz.blogspot.com/
>the core blog of KB9rqz a ham radio that happenens to be Bi sexaul kinky
>
so you can faking mya post from m to spam my blog url so I get paid?

weird orama

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head
"http://www.3ix.org/sys/aff.php?aff=7439" target="_blank"

altopia is never used by KB9RQZ
http://kb9rqz.cc.cc
http://kd8ctl.com
nor is Konstans@hotmail.com ever
btw i can be found at
17366 N River Rd
Chassel Mi

but the cowards asking lack the gut to act

993. Wikipedia is now available on iphones – I am so exited to check it out

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-08-29 06:52:17 UTC
From: wilson <andrade.wilson.wilson@gmail.com>
Message-ID: <89b7eae0-aad7-4aa4-9912-9a28069c481b@d9g2000prh.googlegroups.com>
Source record: 2396

Launch of new Apple applications is no more a buzz but it is when exclusive website like Wikipedia launches its app for the iPhone or iPod Touch. The app is named ‘Wikipedia Mobile' by the non-profit Wikimedia Foundation will be available free for download now from Apple iTunes App Store. I am so exited to check it out. If anyone already has checked it out please share your views.

Check it out at: http://www.ziphone.org/2009/08/wikipedia-official-iphone-application.html

994. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-01 06:00:02 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1251784801@panix.com>
Source record: 2397
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

995. SA612/NE612 - optimal input signal level

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-01 17:01:19 UTC
From: Michał Słomkowski <m.slomkowski@gmail.com>
Message-ID: <c0c5ea92-762b-4e20-a8b5-29b61422104d@l34g2000vba.googlegroups.com>
Source record: 2398

I'm designing a HF transceiver and I'm going to use SA612/NE612 as a product detector. I'm not sure what is the optimal signal level, which should be delivered to the inputs from the IF amplifier to achieve the best performance?

996. Re: Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-01 19:23:31 UTC
From: kb9rqz <mark@kb9rqz.com>
Message-ID: <9704c26c-a034-414a-b23f-899e08059976@e34g2000vbm.googlegroups.com>
Source record: 2399
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Sep 1, 2:00 am, r...@panix.com (rec.radio.amateur.moderated Admin)
wrote:
>
for a ng that was created to aoid troll to be trolling is pretty lame

997. Re: SA612/NE612 - optimal input signal level

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-02 09:16:03 UTC
From: Eamon Skelton <Xnospam@oceanfree.net>
Message-ID: <nJqnm.29895$j7.491069@news.indigo.ie>
Source record: 2400

On Tue, 01 Sep 2009 10:01:19 -0700, Michał Słomkowski wrote:

> I'm designing a HF transceiver and I'm going to use SA612/NE612 as a
> product detector. I'm not sure what is the optimal signal level, which
> should be delivered to the inputs from the IF amplifier to achieve the
> best performance?

There are graphs for input IP3, compression and gain in
the Philips data-sheet. The exact value of IP3 will
depend on the supply voltage, frequency and the configuration
of your circuit. The data-sheet figure for 45MHz is -13dBm.
You will want the IF input to be well below this level.
Somewhere in the -25 to -40dBm region should be ok.

The xx612 is a low power, high gain device. It is not a
particularly good choice as a product detector in a superhet.
A simple two diode balanced mixer or a diode ring mixer (DBM)
would give much better IMD performance and costs even less than
the 612.

73, Ed. EI9GQ.

--
Linux 2.6.30
Remove 'X' to reply by e-mail.

998. Re: SA612/NE612 - optimal input signal level

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-02 13:17:54 UTC
From: Michał Słomkowski <m.slomkowski@gmail.com>
Message-ID: <59b5344b-2235-4d13-b4ef-2a2b6d355fa5@j19g2000yqk.googlegroups.com>
Source record: 2401

Thank you very much for your reply. I'm going to use NE612 because it's quite popular and easy to use. Double balanced mixers are better, but they need vary good impedance matching and high LO signal level. I don't have much experience in building RF circuits, but I think the IMD performance is not as important in product detector, as in the first mixer.

My concept of the receiver stage is that: bandpass filters -> variable attenuators -> first mixer AD831 -> quarz filter XF9/B (a polish replacement) with 9MHz IF -> IF block based on variable gain amplifiers LMH6505 and preamplifier LMH6624 -> product detector.

I would use AD831 also as a product detector but this part is very hard to find in Poland so I only managed to get one piece.

PS. I have read your webpage that helped me much in building my own transceiver!

999. Re: SA612/NE612 - optimal input signal level

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-02 17:17:24 UTC
From: AF6AY <LenAnderson@ieee.org>
Message-ID: <00e7a14e-9ea1-44e2-be92-963e7698fe84@g1g2000vbr.googlegroups.com>
Source record: 2402

On Sep 1, 10:01 am, Michał Słomkowski <m.slomkow...@gmail.com> wrote:
> I'm designing a HF transceiver and I'm going to use SA612/NE612 as a
> product detector. I'm not sure what is the optimal signal level, which
> should be delivered to the inputs from the IF amplifier to achieve the
> best performance?

Not intended to be a high-level input device, the Gilbert Cell
structure of the
SA612 or SA612A should make a good, low-power SSB or CW detector.
Mixer ratings put the IP3 maximum at -15 dbm which comes out to about
40 mV p-p at the input. Mixer conversion gain is somewhere in between
14
and 19 db.

Both input and output impedances are 1.5 KOhms in parallel with about
2 pFd. Both inputs are DC biased internally so capacitive coupling
should
be used (very important so as not to disturb internal biasing).
Output
impedance is 1.5 KOhms from the internal collector loads, should also
be
capacitively-coupled to the audio output. Expect an audio output
level to
be about 1 V peak-to-peak maximum with an IF input of ~ 40 mV peak-to-
peak.
That is running from a +5 VDC supply rail. It is almost the same with
a +6
VDC supply rail.

Carrier re-insertion/mixing (for "product detector" use) would be
about
200 to 300 mV peak-to-peak. Try not to exceed 300 mV p-p as that will
cause distortion from "BFO" harmonic generation. Dropping below 200
mV p-p will cause the conversion transconductance to drop until it
almost
disappears.

Interesting application, breaking some new territory there! :-)
Basically an
HF to low-UHF design, it was intended solely as a low-supply-drain
(2.4 to
3.0 mA) front-end mixer, it should work equally well to "down-mix"
back to
audio range. Mixing is mixing, dependent only on the frequency
response

of the internal transistor junctions.

73,
Len Anderson AF6AY

1000. Re: SA612/NE612 - optimal input signal level

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-02 23:32:57 UTC
From: Kenneth Scharf <wa2mze@bellsouth.net>
Message-ID: <h7mv7o$7ts$1@news.eternal-september.org>
Source record: 2403

AF6AY wrote:
> On Sep 1, 10:01 am, Michaďż˝ Sďż˝omkowski <m.slomkow...@gmail.com> wrote:
>> I'm designing a HF transceiver and I'm going to use SA612/NE612 as a
>> product detector. I'm not sure what is the optimal signal level, which
>> should be delivered to the inputs from the IF amplifier to achieve the
>> best performance?
>
> Not intended to be a high-level input device, the Gilbert Cell
> structure of the
> SA612 or SA612A should make a good, low-power SSB or CW detector.
> Mixer ratings put the IP3 maximum at -15 dbm which comes out to about
> 40 mV p-p at the input. Mixer conversion gain is somewhere in between
> 14
> and 19 db.
>
> Both input and output impedances are 1.5 KOhms in parallel with about
> 2 pFd. Both inputs are DC biased internally so capacitive coupling
> should
> be used (very important so as not to disturb internal biasing).
> Output
> impedance is 1.5 KOhms from the internal collector loads, should also
> be
> capacitively-coupled to the audio output. Expect an audio output
> level to
> be about 1 V peak-to-peak maximum with an IF input of ~ 40 mV peak-to-
> peak.
> That is running from a +5 VDC supply rail. It is almost the same with
> a +6
> VDC supply rail.
>
> Carrier re-insertion/mixing (for "product detector" use) would be
> about
> 200 to 300 mV peak-to-peak. Try not to exceed 300 mV p-p as that will
> cause distortion from "BFO" harmonic generation. Dropping below 200
> mV p-p will cause the conversion transconductance to drop until it
> almost
> disappears.
>
> Interesting application, breaking some new territory there! :-)
> Basically an
> HF to low-UHF design, it was intended solely as a low-supply-drain
> (2.4 to
> 3.0 mA) front-end mixer, it should work equally well to "down-mix"
> back to

> audio range. Mixing is mixing, dependent only on the frequency
> response
> of the internal transistor junctions.
>
> 73,
> Len Anderson AF6AY

Actually the SA602/612 (IIRC the '602 is the better part, the 612 is a fallout of 602's that didn't meet spec) can work well. The Elecraft K2 uses this chip in several places, including the product detector and the K2 has one of the best receiver spec's out there. They did make use of pads in the signal and hfo paths to get the input levels correct, and no doubt matched input and output impedances correctly as well. An inspection of the K2 schematic's would be a good lesson in setting up this part.

1001. Re: SA612/NE612 - optimal input signal level

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-03 22:48:20 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <m6ednVZXZeAp2j3XnZ2dnUVZ_oFi4p2d@web-ster.com>
Source record: 2404

On Tue, 01 Sep 2009 10:01:19 -0700, Michał Słomkowski wrote:

> I'm designing a HF transceiver and I'm going to use SA612/NE612 as a
> product detector. I'm not sure what is the optimal signal level, which
> should be delivered to the inputs from the IF amplifier to achieve the
> best performance?

I did this a long time ago with an NE602, in a receiver with audio-derived AGC (see http://www.wescottdesign.com/articles/MSK/page_79.html). With IF input levels the mixer would suffer diminishing output. This would cause the AGC to get "stuck" in a positive feedback mode and push the thing to ever-higher gain and ever-lower audio levels. I fixed it with a pair of diodes, one in each direction, at the IF input to the mixer (they're not in the schematic). They'd distort the signal at those levels, but at that point it was much higher than desired anyway -- it just needed to keep it low enough to let the AGC grab hold.

I _think_ they were germanium diodes -- IIRC silicon diodes let too much signal through. You could use germanium, Schottky, or plain old silicon diodes plus a 6dB pad, all to equal effect.

I'd tell you how good it sounded, but it was a data-link receiver and I don't recall ever listening to it!

--
www.wescottdesign.com

1002. WTB mrf150

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-04 19:57:55 UTC
From: n2go <n2go@arrl.net>
Message-ID: <7jeom.1131$Jd7.711@nwrddc02.gnilink.net>
Source record: 2405

need set of four.
Jim n2go

1003. Recording CW for a demonstration

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-05 16:12:50 UTC
From: fazamy <fazamy@aol.com>
Message-ID: <9bf82a63-6ee1-41b7-ac22-46bf3da78a16@j39g2000yqh.googlegroups.com>
Source record: 2406

If this is the incorrect group, then please send me to the proper
one. I want to demonstrate the sound of cw with my own message.

I have a sound card. How can I create a wav file that can be saved on
a flash drive? OR
By using DM780 or MultiPSK, can I create a cw message that can be
saved on a flash drive?

Tnx and 73,
KB2AMY
Evan

1004. Homebrew HD?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-05 19:48:16 UTC
From: Bob <kavacon@noga.com>
Message-ID: <APSdnYrEo5fiXT_XnZ2dnUVZ_g-dnZ2d@posted.visi>
Source record: 2407

Hi gang,
Anyone know of an sites of folks doing homebrew HD radio demods? There are several sites out there for doing shortwave DRM (Digital Radio Mondale), but I'm wondering if any efforts have been made to build similar hardware/software for the HD radio broadcasting that takes place on the U.S AM broadcast band.

Bob WB0POQ

1005. Re: Recording CW for a demonstration

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-05 21:31:42 UTC
From: fazamy <fazamy@aol.com>
Message-ID: <102cc1c4-89e9-4838-aed8-918b3459512f@t2g2000yqn.googlegroups.com>
Source record: 2408

On Sep 5, 12:12 pm, fazamy <faz...@aol.com> wrote:
> If this is the incorrect group, then please send me to the proper
> one. I want to demonstrate the sound of cw with my own message.
>
> I have a sound card. How can I create a wav file that can be saved on
> a flash drive? OR
> By using DM780 or MultiPSK, can I create a cw message that can be
> saved on a flash drive?
>
> Tnx and 73,
> KB2AMY
> Evan

Guys,

I figured it out by myself. Audacity is the software I can use to do
my project.
TU,
KB2AMY

1006. Re: Homebrew HD?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-06 01:11:01 UTC
From: sorry-spammers <"w9wi\\@(sorry-spammers)">
Message-ID: <T_CdnfRGHvjVkT7XnZ2dnUVZ_gxi4p2d@earthlink.com>
Source record: 2409

Bob wrote:
> Hi gang,
> Anyone know of an sites of folks doing homebrew HD radio demods? There
> are several sites out there for doing shortwave DRM (Digital Radio Mondale),
> but I'm wondering if any efforts have been made to build similar
> hardware/software for the HD radio broadcasting that takes place on the U.S
> AM broadcast band.

Haven't heard of any.

Unlike DRM, HD Radio is a proprietary protocol, I don't *think* they release enough details to implement it unless you're a chipmaker who's paid the
royalties.

(I suppose one could reverse-engineer it -- to my knowledge there is no encryption involved)

--

Doug Smith W9WI
Pleasant View, TN EM66

1007. teflon wire

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-06 14:29:29 UTC
From: n2go <n2go@arrl.net>
Message-ID: <dHPom.1338$Jd7.723@nwrddc02.gnilink.net>
Source record: 2410

22AWG stranded,silver plated, teflon insulated wire in 100 foot lengths.
package of 500 feet (five rolls) $26 shipped if paid by paypal.

save on shipping with two packs (1000' total = $47 shipped if paid by
paypal)

The wire is packed and is in an assortment of colors. No choices of
specific colors. The silver plating make soldering easy. It won't shrink
and is rated for 600V and 200 degrees C. Some have used it in homebrew
radios.amplifiers, tube radios, portable antennas etc.
Jim n2go

1008. Re: SA612/NE612 - optimal input signal level

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-06 15:42:12 UTC
From: Michał Słomkowski <m.slomkowski@gmail.com>
Message-ID: <5b38208a-db01-4745-be56-6e7751fb28bb@q7g2000yqi.googlegroups.com>
Source record: 2411

I decided the IF amplifier will deliver the signal to SA612 at the level -40dBm. Thanks everyone for advices.

1009. Re: Homebrew HD?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-06 16:09:28 UTC
From: raypsi <rborowiak@gmail.com>
Message-ID: <1d17abcf-e1f4-4e7a-b344-93905cef1984@v23g2000pro.googlegroups.com>
Source record: 2412

Hey OM:

I would suspect that the FCC knows everything there is to know about
AM broadcast band HD. They sure did go thru extensive testing to get
HD on that band.
Towit: the FCC has to know what is going on and how they is doing the
goings ons.

73 OM

de n8zu

On Sep 6, 12:11 pm, sorry-spammers <""w9wi\"@(sorry-spammers)"> wrote:

> Bob wrote:
>
> Haven't heard of any.
>
> Unlike DRM, HD Radio is a proprietary protocol, I don't *think* they release enough
details to implement it unless you're a chipmaker who's paid the
> royalties.
>
> (I suppose one could reverse-engineer it -- to my knowledge there is no encryption
involved)
>
> --
>
> Doug Smith W9WI
> Pleasant View, TN EM66

1010. Re: Homebrew HD?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-07 02:46:59 UTC
From: Kenneth Scharf <wa2mze@bellsouth.net>
Message-ID: <h81s39$j12$1@news.eternal-september.org>
Source record: 2413

Bob wrote:
> Hi gang,
> Anyone know of an sites of folks doing homebrew HD radio demods? There
> are several sites out there for doing shortwave DRM (Digital Radio Mondale),
> but I'm wondering if any efforts have been made to build similar
> hardware/software for the HD radio broadcasting that takes place on the U.S
> AM broadcast band.
>
> Bob WB0POQ
>
>
BTW ya all know that the HD in HD radio does NOT stand for 'high def'.
(It means "hybrid digital").

1011. Seeking New FAQ/Intro Maintainers for rec.radio.amateur.*

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-07 06:05:01 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/recruitment-1-1252303500@panix.com>
Source record: 2414
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/recruitment
Revision: 1.1 2007/09/29 18:42:47
Posting-Frequency: posted monthly
URL: http://www.faqs.org/faqs/radio/personal-intro/

Changes followed by "|".

The rec.radio.info newsgroup, first established in 1993, has been
recently revived by an active moderation team. We are currently seeking
suitable information, FAQ, and bulletin articles from the entire
rec.radio.* newsgroup hierarchy for simultaneous cross-posting to our
newsgroup.

We are seeking a replacement maintainer for the following information
bulletin formerly posted to rec.radio.amateur.* (and currently archived
at http://www.faqs.org/faqs/radio/personal-intro/ ):

radio/personal-intro
Subject: Guide to the rec.radio Newsgroups
Maintainer: jeffreyh@Hawaii.Edu (Jeffrey Herman)
Last Posted: 9 Nov 2001 06:18:17 GMT
Posting-Frequency: 15th of each month

We are willing to provide any technical support necessary to get this
article updated and automatically posted again at a regular interval.
This would include establishing contact with the original maintainer for
any necessary permissions. We would prefer to seek a new, dedicated
maintainer at this time, rather than start auto-posting the original
article ourselves.

For more information about our newsgroup, see:

http://www.panix.com/~rram/usenet/rri/index.html

Please direct any comments, questions, or criticisms to
rec-radio-info-request@panix.com.
```

1012. Re: So I have all this old radio equipment...

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-10 01:45:14 UTC
From: Kenneth Scharf <wa2mze@bellsouth.net>
Message-ID: <h89ljcass1@news.eternal-september.org>
Source record: 2415

Jake wrote:
> Hey all,
>
> Many years ago (Late 80's) I was given a variety of radio equipment
> from a gentleman I knew. He was going to new guinea as a missionary
> and gave me a bunch of parts/projects/stuff.
>
> I have identified one of the (transcievers?) as an ARC-5. Also there
> is at least 2 more of these in parts, maybe more. Also a bunch of
> variable capacitors (the air-core metal finned ones) and various tubes
> and coils and other random stuff.
>
> This stuff has been sitting in my attic for 20 years, slowly
> collecting dust and corrosion. A long time ago, I was going to get my
> general class license. I never took the test, and just don't have much
> hobby time anymore.
>
> Does anyone know if this equipment is worth identifying and posting
> somewhere for sale/trade? And if so, where would I find people
> interested in this stuff?
>
> Thanks in advance :-D

The model number ARC-5 actually refers to a series of equipment designed for use in aircraft in the late 30's and into the 40's and 50's. This equipment consisted of a series of single band receivers and transmitters, modulators, and control boxes. Most of the units covered the frequency range from 3-9 mhz, some lower frequency units went down to 1.5 mhz, and some of the receivers went down as far as 190khz. There were also transmitters and receivers for the 100-150mhz region, but these used a different design.

The MF and HF receivers had a tube lineup of 12SK7 rf and if, 12K8 converter, 12SR7 detector/bfo, 12A6 af output. Some sets used a 12SF7 in the final IF/detector. The transmitters used 1626 oscillators driving 1625 finals, a 1629 eye tube was used as a frequency reference with a crystal. The VHF receivers used 9000 series tubes in the front end, the VHF transmitters used 1625's and 832's. Both single and dual tube modulators were made using 1625's.

A later series of ARC-5 type equipment used Loktal tubes. The receivers in these did NOT have BFO oscillators as they were used only for AM phone reception.

There were slight differences between the Navy and Army/Aircor units.

After the end of WWII and the Korean war the government surplus'ed large numbers of this equipment. Hams quickly found them to be a good resource for parts, and also used them 'as is' or modified. Today these units still show up at hamfest flea markets. Unmodified near mint condition ARC-5 units can easily fetch near or over $100 each on Eaybay these days, but you can still find units in much worse condition suitable for parts or experimenting with for much less. The newer sets using Loktal tubes were not made in as large numbers as the older ones, but they were quite plentiful in recent years. These sets are not in as much demand as the older 'classic' units.

If your ARC-5 radios are in near mint condition you might give any of the groups that restore WWII era planes a call. The Confederate Air Force comes to mind.

1013. Re: So I have all this old radio equipment...

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-10 10:49:18 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <Q_KdnVxoLo0yRDXXnZ2dnUVZ_vednZ2d@bright.net>
Source record: 2416

Kenneth Scharf wrote:

>
> If your ARC-5 radios are in near mint condition you might give any of
> the groups that restore WWII era planes a call. The Confederate Air
> Force comes to mind.

Oops, I think you meant COMMEMORATIVE Air Force (due to "political correctness" B.S.)...I do agree...these were used in WWII planes such as the B-17 (if I recall correctly) so there is historical value if nothing else...

http://www.commemorativeairforce.org/

Scott
N0EDV

1014. Re: So I have all this old radio equipment...

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-10 10:52:22 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <Q_KdnV9oLo37RzXXnZ2dnUVZ_vednZ2d@bright.net>
Source record: 2417

Scott wrote:
> Kenneth Scharf wrote:
>
>>
>> If your ARC-5 radios are in near mint condition you might give any of
>> the groups that restore WWII era planes a call. The Confederate Air
>> Force comes to mind.
>
> Oops, I think you meant COMMEMORATIVE Air Force (due to "political
> correctness" B.S.)...I do agree...these were used in WWII planes such as
> the B-17 (if I recall correctly) so there is historical value if nothing
> else...
>
> http://www.commemorativeairforce.org/
>
> Scott
> N0EDV
>
>

Here is contact info if you would like to donate some or all to the CAF...

Donations Financial, Memorabilia, Aircraft or Parts

* If you wish to make a donation of World War II aircraft parts, or
an aircraft, please contact rstenevik@cafhq.org.

* If you wish to donate artifacts or memorabilia from the World War
II era, please contact exhibits@aahm.org.

* If you would like to make a monetary donation to assist in
keeping CAF airplanes airworthy, please contact tbrown@cafhq.org.

Scott
N0EDV

1015. Re: Homebrew HD?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-10 20:25:10 UTC
From: stan <tsanford@nf.sympatico.ca>
Message-ID: <527d1dba-6588-4e5d-ab0f-17c536267f34@y42g2000yqb.googlegroups.com>
Source record: 2418

On Sep 7, 12:46 am, Kenneth Scharf <wa2...@bellsouth.net> wrote:
>: Bob wrote
>
> BTW ya all know that the HD in HD radio does NOT stand for 'high def'.
> (It means "hybrid digital").

Gee thanks; was too embarrassed to ask!!!! :-)

1016. Re: Homebrew HD?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-11 03:28:58 UTC
From: Paul_P <"REMOVE paul"@REMOVE>
Message-ID: <h8cg5s$7nk$1@news.eternal-september.org>
Source record: 2419

"stan" <tsanford@nf.sympatico.ca> wrote in message
news:527d1dba-6588-4e5d-ab0f-17c536267f34@y42g2000yqb.googlegroups.com...
On Sep 7, 12:46 am, Kenneth Scharf <wa2...@bellsouth.net> wrote:
>: Bob wrote
>
> BTW ya all know that the HD in HD radio does NOT stand for 'high def'.
> (It means "hybrid digital").

Gee thanks; was too embarrassed to ask!!!! :-)

Please don't be. I have asked questions like that too.

Paul P.

1017. Antenna advice?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-11 04:15:23 UTC
From: Ron <ronnclair@yahoo.com>
Message-ID: <l9kqm.107$tG1.88@newsfe22.iad>
Source record: 2420

Hi

I have a 50 ft tower just ready to throw up something to operate.

Cost is the problem but I have a lot of parts to build. I want to put up a dipole (I have a manual all band tuner) and my question is should feed it with ladder line or feed it with coax and then run each leg about 68 ft .

Second idea is I have an old aluminum omni antenna that used to have 3 traps within it, however at that height it will come down quickly as this antenna is meant to be on the ground (no ground planes) so I want to make this omni as long as practically possible and tune it to utilize it as best possible.

Any suggestions? This is really all I have to work with. Only want to climb this thing a couple times and hope its good for the winter.

Thanks
73s

Ron

1018. Re: Antenna advice?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-11 15:15:54 UTC
From: JB <nospam@goofball.net>
Message-ID: <KQtqm.2121$tl3.1663@nwrddc01.gnilink.net>
Source record: 2421

" Ron" <ronnclair@yahoo.com> wrote in message
news:l9kqm.107$tG1.88@newsfe22.iad...
> Hi
>
> I have a 50 ft tower just ready to throw up something to operate.
>
> Cost is the problem but I have a lot of parts to build. I want to put up a
> dipole (I have a manual all band tuner) and my question is should feed it
> with ladder line or feed it with coax and then run each leg about 68 ft .
>
> Second idea is I have an old aluminum omni antenna that used to have 3
traps
> within it, however at that height it will come down quickly as this
antenna
> is meant to be on the ground (no ground planes) so I want to make this
omni
> as long as practically possible and tune it to utilize it as best
possible.
>
> Any suggestions? This is really all I have to work with. Only want to
climb
> this thing a couple times and hope its good for the winter.
>
A commercially built Yagi will usually work out of the box on a tower if you measure carefully. A G5RV will work without much fiddling. The vertical won't be worth anything on the tower. If you want to shunt feed the tower and extend it another 17 ft. you could probably do well on 40 and 30 meters in the wee hours of the morning. You should post in RRA Antenna newsgroup, as there are experts who will have a lot of detail and time on their hands and are fun to watch bicker.

1019. Re: Recording CW for a demonstration

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-11 15:18:51 UTC
From: JB <nospam@goofball.net>
Message-ID: <vTtqm.2122$tl3.186@nwrddc01.gnilink.net>
Source record: 2422

"fazamy" <fazamy@aol.com> wrote in message
news:102cc1c4-89e9-4838-aed8-918b3459512f@t2g2000yqn.googlegroups.com...
On Sep 5, 12:12 pm, fazamy <faz...@aol.com> wrote:
> If this is the incorrect group, then please send me to the proper
> one. I want to demonstrate the sound of cw with my own message.
>
> I have a sound card. How can I create a wav file that can be saved on
> a flash drive? OR
> By using DM780 or MultiPSK, can I create a cw message that can be
> saved on a flash drive?
>
> Tnx and 73,
> KB2AMY
> Evan

Guys,

I figured it out by myself. Audacity is the software I can use to do
my project.
TU,
KB2AMY

I like that too. Just record some real QSO off the air.

1020. Re: Antenna advice?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-13 16:17:34 UTC
From: Kenneth Scharf <wa2mze@bellsouth.net>
Message-ID: <h8j5qnrsj1@news.eternal-september.org>
Source record: 2423

JB wrote:
> " Ron" <ronnclair@yahoo.com> wrote in message
> news:l9kqm.107$tG1.88@newsfe22.iad...
>> Hi
>>
>> I have a 50 ft tower just ready to throw up something to operate.
>>
>> Cost is the problem but I have a lot of parts to build. I want to put up a
>> dipole (I have a manual all band tuner) and my question is should feed it
>> with ladder line or feed it with coax and then run each leg about 68 ft .
>>
>> Second idea is I have an old aluminum omni antenna that used to have 3
> traps
>> within it, however at that height it will come down quickly as this
> antenna
>> is meant to be on the ground (no ground planes) so I want to make this
> omni
>> as long as practically possible and tune it to utilize it as best
> possible.
>> Any suggestions? This is really all I have to work with. Only want to
> climb
>> this thing a couple times and hope its good for the winter.
>>
> A commercially built Yagi will usually work out of the box on a tower if you
> measure carefully. A G5RV will work without much fiddling. The vertical
> won't be worth anything on the tower. If you want to shunt feed the tower
> and extend it another 17 ft. you could probably do well on 40 and 30 meters
> in the wee hours of the morning. You should post in RRA Antenna newsgroup,
> as there are experts who will have a lot of detail and time on their hands
> and are fun to watch bicker.
>
While putting a vertical on a tower seems a waste of a tower, verticals
DO work better on a tower if they are of the half wave length center
feed kind, such as the GAP Titan. I have mine on a short tower against
the house so that the base of the antenna is just above the roof line.
The antenna is on a tilt over mount so I can lower against the roof
whenever a tropical cyclone blows through here. The antenna works
better up 25 feet than ground mounted (and the kids can't trip over it
in the back yard).

1021. Re: Antenna advice?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-13 16:50:02 UTC
From: JB <nospam@goofball.net>
Message-ID: <_o9rm.2109$Jd7.1178@nwrddc02.gnilink.net>
Source record: 2424

A 4btv trap vertical or the like would be a different matter, requiring some fiddling. A Yagi and (or) G5RV would require a minimum of fiddling. A ladder line fed homemade G5RV in inverted vee would be the least expensive I could think of. A used 3 element Yagis can be cleaned up and re-used later..

The trap vertical that was mentioned would probably be a real hassle to tune-up on the tower.

1022. Re: Antenna advice?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-13 19:18:28 UTC
From: Kenneth Scharf <wa2mze@bellsouth.net>
Message-ID: <h8jgdtcuf1@news.eternal-september.org>
Source record: 2425

JB wrote:
> A 4btv trap vertical or the like would be a different matter, requiring some
> fiddling. A Yagi and (or) G5RV would require a minimum of fiddling. A
> ladder line fed homemade G5RV in inverted vee would be the least expensive I
> could think of. A used 3 element Yagis can be cleaned up and re-used
> later..
>
> The trap vertical that was mentioned would probably be a real hassle to
> tune-up on the tower.
>
The GAP Titan can be dumped out of the box, assembled (use a tape
measure to get everything as per the manual) and put up without ANY
fooling around. You *MIGHT* have to make a minor adjustment to get the
80 and 40 meter bands right with the lowest SWR centered in the middle
of the band segment that you operate most, but mine came out perfect
using the factory directions.

1023. Re: Antenna advice?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-13 20:00:12 UTC
From: JB <nospam@goofball.net>
Message-ID: <gbcrm.2324$tl3.1745@nwrddc01.gnilink.net>
Source record: 2426

"Kenneth Scharf" <wa2mze@bellsouth.net> wrote in message
news:h8jgdtcuf1@news.eternal-september.org...
> JB wrote:
> > A 4btv trap vertical or the like would be a different matter, requiring
some
> > fiddling. A Yagi and (or) G5RV would require a minimum of fiddling. A
> > ladder line fed homemade G5RV in inverted vee would be the least
expensive I
> > could think of. A used 3 element Yagis can be cleaned up and re-used
> > later..
> >
> > The trap vertical that was mentioned would probably be a real hassle to
> > tune-up on the tower.
> >
> The GAP Titan can be dumped out of the box, assembled (use a tape
> measure to get everything as per the manual) and put up without ANY
> fooling around. You *MIGHT* have to make a minor adjustment to get the
> 80 and 40 meter bands right with the lowest SWR centered in the middle
> of the band segment that you operate most, but mine came out perfect
> using the factory directions.

You are telling me that the measurements are the same for tower mounting?

1024. FS GR slotted line and accesories

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-15 03:42:19 UTC
From: Henry <wa0goz@arrl.net>
Message-ID: <h8n2ej$2gb$1@news.eternal-september.org>
Source record: 2427

I have the following General Radio equipment for sale. All of it is in very good condition and working:

The following items I would like to sell as a set:

1 874-LB 55 cm Slotted Line
1 874-LV Micrometer for the slotted line
2 874-LTL Trombone lines
1 874-GA Adjustable Attenuator
1 874-L30 30 cm Air Line
3 874-L20 20 cm Air Lines
4 874-L10 10 cm Air Lines
1 874-F1000 1000 MHz Low Pass Filter
1 874-L500 500 MHz Low Pass Filter
1 874-D50 50 cm Adjustable Stub
1 874-D50L 50 cm Adjustable Stub
1 874-D20 20 cm Adjustable Stub
2 874-LA Adjustable Line
5 874-T Tee's
1 874-EL Elbow
2 874-K Coupling Capacitors
5 Small diameter cables with GR conn.'s on both ends
2 Small diameter cables with GR conn. on one end and BNC on other
1 Small diameter cable with GR conn. on one end and banana plugs on other
5 Large diameter cables with GR conn. on both ends

I will accept any reasonable offer plus postage. I can send pictures if requested.

I can be reached at either wa0goz@arrl.net or 651-426-4144. Ask for Henry.

1025. Re: Antenna advice?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-15 13:47:10 UTC
From: Ron <ronnclair@yahoo.com>
Message-ID: <jVMrm.36411$u76.35194@newsfe10.iad>
Source record: 2428

Thank you kindly for all the info

I have a lot of wire, can make any dipole, I have this 50ft tower that I want to make a dipole and omni on the top.

The omni I want to be tunable so I can use it on other bands such as marine band, to communicate with my boat

I have the manual tuner with reflected power measurements, so that is ok. I want to know what is better, the dipole fed with coax or fed with ladder line. The coax will run out the house, past the alumninum siding and be taped to the tower, the ladder line I can run out the house, past the same aluminum siding but can keep away from the tower about 4 feet until it reaches the top where the dipole will split it and run the longest length I can (I have the room) so that I can utilize all the bands with my tuner.

All suggestions and advice are excellent and I hope to hear and learn more

thanks

73

"JB" <nospam@goofball.net> wrote in message
news:gbcrm.2324$tl3.1745@nwrddc01.gnilink.net...
>
> "Kenneth Scharf" <wa2mze@bellsouth.net> wrote in message
> news:h8jgdtcuf1@news.eternal-september.org...
>> JB wrote:
>> > A 4btv trap vertical or the like would be a different matter, requiring
> some
>> > fiddling. A Yagi and (or) G5RV would require a minimum of fiddling. A
>> > ladder line fed homemade G5RV in inverted vee would be the least
> expensive I
>> > could think of. A used 3 element Yagis can be cleaned up and re-used
>> > later..
>> >
>> > The trap vertical that was mentioned would probably be a real hassle to
>> > tune-up on the tower.
>> >
>> The GAP Titan can be dumped out of the box, assembled (use a tape
>> measure to get everything as per the manual) and put up without ANY
>> fooling around. You *MIGHT* have to make a minor adjustment to get the
>> 80 and 40 meter bands right with the lowest SWR centered in the middle
>> of the band segment that you operate most, but mine came out perfect
>> using the factory directions.
>

> You are telling me that the measurements are the same for tower mounting?
>

1026. Re: Antenna advice?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-15 14:49:44 UTC
From: JB <nospam@goofball.net>
Message-ID: <cQNrm.2522$tl3.1595@nwrddc01.gnilink.net>
Source record: 2429

A fan dipole has multiple dipoles with the same feed using spreader insulators at the end of each shorter dipole. Full size 40 meter dipole usually works on 15 with a tuner as it is not far from a 3/4 wave, and 80 might work on 10. I always wanted a full size cage dipole for 80 and 75. This has several wires for broad band operation. HF Discone is another interesting broadband antenna. You could use the tower as a support but takes up some space.

Good luck

1027. Re: Antenna advice?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-15 15:33:10 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <hkbva5tj6066rplvkvpuqb768ktetknj2o@4ax.com>
Source record: 2430

On Fri, 11 Sep 2009 00:15:23 -0400, " Ron" <ronnclair@yahoo.com>
wrote:

>
>I have a 50 ft tower just ready to throw up something to operate.
>
>Cost is the problem but I have a lot of parts to build. I want to put up a
>dipole (I have a manual all band tuner) and my question is should feed it
>with ladder line or feed it with coax and then run each leg about 68 ft .

I have a single tree in the middle at my site and I use it as the
feedpoint for an inverted-V antenna. Each segment is about 20 m long
from the feed point for 3.5 MHz operation. Also there are two 10 m
segments in different directions for 7 (and 21 MHz). There are some
ferrite toroids on the coax close to the feed point as a current
balun.

I also experimented with two 5 m segments from the same feed point
into slightly different directions for 14 MHz operation.
Unfortunately, it was quite hard to find the suitable length for these
segments using any SWR measurements and by using a noise bridge, I had
to extend the segments with nearly a meter, in order to get the SWR
down to operate without a tuner. Of course this varies from site to
site.

Paul OH3LWR

1028. Power supply transformer advice

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-15 16:12:41 UTC
From: Andy GD1MIP <Andy.GD1MIP.4f57286@radiobanter.com>
Message-ID: <Andy.GD1MIP.4f57286@radiobanter.com>
Source record: 2431

Hi I am building a (240volt in) 13.8 volt (out) PSU along the lines of this plan..
http://www.warc.org.uk/proj_psu.php it is very similar to the old Marchwood practical wireless unit from the early 1980's using 2n3055 transistors.

My question. The spec says the transformer must have a secondary of 16.5 volt. Now when I last built a PSU using a similar plan the transformer output could be much higher, in the region of 15 to 20 volts.

I have a Talema branded toroid I want to use, its spec is as follows (from maker)
+++++
Toroidal transformer type 5028-P3S03:
Prim: 0-110V-230V-240V orange-yellow-violet-blue
Sec1: 20V/6A green-red
Sec2: 20V/6A black-white
Sec3: 55V/2,5A braun-braun
If you use only the 2x20V you can get out 9A of each winding (no load on the 55V)
+++++

as you can see the secondary output is 20 volt, now folks do you think this transformer will suffice at 20 volts, or should I removed a little winding to bring it down?

73 Andy

PS the variac is just there for scale.

--
Andy GD1MIP

1029. Re: Power supply transformer advice

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-15 16:52:05 UTC
From: You <you@shadow.orgs>
Message-ID: <you-9FC9B9.08520115092009@unknown.usenetserver.com>
Source record: 2432

In article <Andy.GD1MIP.4f57286@radiobanter.com>,
Andy GD1MIP <Andy.GD1MIP.4f57286@radiobanter.com> wrote:

> Hi I am building a (240volt in) 13.8 volt (out) PSU along the lines of
> this plan..
> http://www.warc.org.uk/proj_psu.php it is very similar to the old
> Marchwood practical wireless unit from the early 1980's using 2n3055
> transistors.
>
> My question. The spec says the transformer must have a secondary of
> 16.5 volt. Now when I last built a PSU using a similar plan the
> transformer output could be much higher, in the region of 15 to 20
> volts.
>
> I have a Talema branded toroid I want to use, its spec is as follows
> (from maker)
> +++++
> Toroidal transformer type 5028-P3S03:
> Prim: 0-110V-230V-240V orange-yellow-violet-blue
> Sec1: 20V/6A green-red
> Sec2: 20V/6A black-white
> Sec3: 55V/2,5A braun-braun
> If you use only the 2x20V you can get out 9A of each winding (no load
> on the 55V)
> +++++
>
>
> as you can see the secondary output is 20 volt, now folks do you think
> this transformer will suffice at 20 volts, or should I removed a little
> winding to bring it down?
>
> 73 Andy
>
> PS the variac is just there for scale.

By using it the way it is your only design worry is that you will be
dumping more power across the 2N3055 Regulator Transistors, and will
need more of them, for the same current output, due to Dissipation
Limits of the heatsinks and transistor cases, because of the higher
Voltage Drop across the regulators. Also recognise that you will have a
much higher DC Voltage going into the regulators, after some Capacitor
Filtering. Likely up near 25 Vdc, which means you will be dumping
roughly 50% of the provided transformer power in the Regulation System.

1030. Re: Power supply transformer advice

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-15 17:33:12 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <MuqdnWq3S8xFUjLXnZ2dnUVZ_tidnZ2d@web-ster.com>
Source record: 2433

On Tue, 15 Sep 2009 17:12:41 +0100, Andy GD1MIP wrote:

> Hi I am building a (240volt in) 13.8 volt (out) PSU along the lines of
> this plan..
> http://www.warc.org.uk/proj_psu.php it is very similar to the old
> Marchwood practical wireless unit from the early 1980's using 2n3055
> transistors.
>
> My question. The spec says the transformer must have a secondary of 16.5
> volt. Now when I last built a PSU using a similar plan the transformer
> output could be much higher, in the region of 15 to 20 volts.
>
> I have a Talema branded toroid I want to use, its spec is as follows
> (from maker)
> +++++
> Toroidal transformer type 5028-P3S03: Prim: 0-110V-230V-240V
> orange-yellow-violet-blue Sec1: 20V/6A green-red
> Sec2: 20V/6A black-white
> Sec3: 55V/2,5A braun-braun
> If you use only the 2x20V you can get out 9A of each winding (no load on
> the 55V)
> +++++
>
>
> as you can see the secondary output is 20 volt, now folks do you think
> this transformer will suffice at 20 volts, or should I removed a little
> winding to bring it down?
>
> 73 Andy
>
> PS the variac is just there for scale.

If you _really_ want to do some work you could remove all the secondary windings and replace them with a single 16V winding; that'll give you 25% more current just from the drop to 16V from 20V, plus whatever extra power you can take because you used the space formerly taken up by the 55V winding to put in bigger wire.

Lots -o- work, though.

--
www.wescottdesign.com

1031. Re: Power supply transformer advice

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-15 17:53:02 UTC
From: Dave M <masondg4499@comcast.net>
Message-ID: <eYWdnR7IseHjSTLXnZ2dnUVZ_uKdnZ2d@giganews.com>
Source record: 2434

"Andy GD1MIP" <Andy.GD1MIP.4f57286@radiobanter.com> wrote in message
news:Andy.GD1MIP.4f57286@radiobanter.com...
>
> Hi I am building a (240volt in) 13.8 volt (out) PSU along the lines of
> this plan..
> http://www.warc.org.uk/proj_psu.php it is very similar to the old
> Marchwood practical wireless unit from the early 1980's using 2n3055
> transistors.
>
> My question. The spec says the transformer must have a secondary of
> 16.5 volt. Now when I last built a PSU using a similar plan the
> transformer output could be much higher, in the region of 15 to 20
> volts.
>
> I have a Talema branded toroid I want to use, its spec is as follows
> (from maker)
> +++++
> Toroidal transformer type 5028-P3S03:
> Prim: 0-110V-230V-240V orange-yellow-violet-blue
> Sec1: 20V/6A green-red
> Sec2: 20V/6A black-white
> Sec3: 55V/2,5A braun-braun
> If you use only the 2x20V you can get out 9A of each winding (no load
> on the 55V)
> +++++
>
>
> as you can see the secondary output is 20 volt, now folks do you think
> this transformer will suffice at 20 volts, or should I removed a little
> winding to bring it down?
>
> 73 Andy
>
> PS the variac is just there for scale.
>
>
>
>
> --
> Andy GD1MIP

The transformer will work in the project that you are looking at, however,
the pass transistors will run significantly hotter than if you used the
transformer voltage specified. Your transformer will produce about 28VDC

after the rectifier/filter. The pass transistors must drop the difference between 28 VDC and the output voltage (13.8VDC), which is roughly 14 VDC. Multiply that by the output current to get the power that the pass transistors must dissipate. Watts = Voltage * Current. Watts create heat, which must be dissipated by the heatsink.
Since you're wanting some respectable current from this project, you could do as you suggested; remove a few windings from the 20VAC secondaries to reduce the power that the pass transistors dissipate. But, depending on the construction of the transformer, it might be difficult to do.
Another way to reduce the voltage from the transformer is to put a "bucking" transformer in the primary of your transformer to reduce the primary voltage to it.

--
Dave M
masondg44 at comcast dot net

1032. Re: Power supply transformer advice

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-16 11:20:17 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <bcf97ebf-a53e-4193-9eed-8daa96d244fc@v2g2000vbb.googlegroups.com>
Source record: 2435

On Sep 15, 12:12 pm, Andy GD1MIP <Andy.GD1MIP.4f57...@radiobanter.com>
wrote:
> Hi I am building a (240volt in) 13.8 volt (out) PSU along the lines of
> this plan..http://www.warc.org.uk/proj_psu.php it is very similar to the old
> Marchwood practical wireless unit from the early 1980's using 2n3055
> transistors.
>
> My question. The spec says the transformer must have a secondary of
> 16.5 volt. Now when I last built a PSU using a similar plan the
> transformer output could be much higher, in the region of 15 to 20
> volts.
>
> I have a Talema branded toroid I want to use, its spec is as follows
> (from maker)
> +++++
> Toroidal transformer type 5028-P3S03:
> Prim: 0-110V-230V-240V orange-yellow-violet-blue
> Sec1: 20V/6A green-red
> Sec2: 20V/6A black-white
> Sec3: 55V/2,5A braun-braun
> If you use only the 2x20V you can get out 9A of each winding (no load
> on the 55V)
> +++++
>
> as you can see the secondary output is 20 volt, now folks do you think
> this transformer will suffice at 20 volts, or should I removed a little
> winding to bring it down?
>
> 73 Andy
>
> PS the variac is just there for scale.
>
> --
> Andy GD1MIP

As others have indicated the increased voltage will cause the
transistors to have to dissipate more power but the result will be
better regulation. I recommend that you don't use the 3055
transistors, there are better choices. I blew many of them before
replacing them with ECG 181, there is a 2N number this is equivalent
to but I cant remember it right now.

Jimmie

1033. Re: Power supply transformer advice

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-16 11:41:10 UTC
From: brian whatcott <betwys1@sbcglobal.net>
Message-ID: <jfqdnc3XF744Ui3XnZ2dnUVZ_u2dnZ2d@giganews.com>
Source record: 2436

Andy GD1MIP wrote:
> Hi I am building a (240volt in) 13.8 volt (out) PSU along the lines of
> this plan..
> http://www.warc.org.uk/proj_psu.php it is very similar to the old
> Marchwood practical wireless unit from the early 1980's using 2n3055
> transistors.
>
> My question. The spec says the transformer must have a secondary of
> 16.5 volt. Now when I last built a PSU using a similar plan the
> transformer output could be much higher, in the region of 15 to 20
> volts.
>
> I have a Talema branded toroid I want to use, its spec is as follows
> (from maker)
> +++++
> Toroidal transformer type 5028-P3S03:
> Prim: 0-110V-230V-240V orange-yellow-violet-blue
> Sec1: 20V/6A green-red
> Sec2: 20V/6A black-white
> Sec3: 55V/2,5A braun-braun
> If you use only the 2x20V you can get out 9A of each winding (no load
> on the 55V)
> +++++
>
>
> as you can see the secondary output is 20 volt, now folks do you think
> this transformer will suffice at 20 volts, or should I removed a little
> winding to bring it down?
>
> 73 Andy
>
> PS the variac is just there for scale.
>
>
>
>
Find a 240/50 volt transformer , and wire the 50 volt output in
antiphase with the mains input to the target transformer, and don't fool
with windings at all....

Brian W

1034. Re: Power supply transformer advice

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-16 14:48:51 UTC
From: stan <tsanford@nf.sympatico.ca>
Message-ID: <83f35930-e6f3-406b-a32a-c36590306432@z28g2000vbl.googlegroups.com>
Source record: 2437

On Sep 16, 9:41 am, brian whatcott <betw...@sbcglobal.net> wrote:
> Andy GD1MIP wrote:
> > Hi I am building a (240volt in) 13.8 volt (out) PSU along the lines of
> > this plan..
> >http://www.warc.org.uk/proj_psu.php it is very similar to the old
> > Marchwood practical wireless unit from the early 1980's using 2n3055
> > transistors.
>
> > My question. The spec says the transformer must have a secondary of
> > 16.5 volt. Now when I last built a PSU using a similar plan the
> > transformer output could be much higher, in the region of 15 to 20
> > volts.
>
> > I have a Talema branded toroid I want to use, its spec is as follows
> > (from maker)
> > +++++
> > Toroidal transformer type 5028-P3S03:
> > Prim: 0-110V-230V-240V orange-yellow-violet-blue
> > Sec1: 20V/6A green-red
> > Sec2: 20V/6A black-white
> > Sec3: 55V/2,5A braun-braun
> > If you use only the 2x20V you can get out 9A of each winding (no load
> > on the 55V)
> > +++++
>
> > as you can see the secondary output is 20 volt, now folks do you think
> > this transformer will suffice at 20 volts, or should I removed a little
> > winding to bring it down?
>
> > 73 Andy
>
> > PS the variac is just there for scale.
>
> Find a 240/50 volt transformer , and wire the 50 volt output in
> antiphase with the mains input to the target transformer, and don't fool
> with windings at all....
>
> Brian W- Hide quoted text -
>
> - Show quoted text -

240 volt input with 55 volts (antiphase) i.e. 'bucking' the 240 input
is 240 minus 55 = 185 volts. The input voltage being educed from 240
to 185 volts. And 185/240 = 0.77

With that the two remaining secondaries would be 20 x 0.77 = 15.4 volts. Maybe that's a little bit too low for what is needed? But worth a try?

But also if the 55 and 240 windings are connected in series (aiding or in-phase) and 240 is applied to that; we could have a 240 + 55 = 295 winding.

Then with 240 connected to what is now, in effect, a 295 volt winding?
So 240/295 = 0.81
And 20 x 0.81 = 16.27 Very close to 16.5?

Also' and if NOT with two 6 amp rated secondaries I would certainly 'try' getting 9 amps from each of them.

BTW the insulation of any secondary connected in series with the mains voltage primary must have adequate insulation to withstand peak mains voltages (about 340 v AC). I haven't done this at 140 volts but have done it at 120 volts; by connecting 12 volt secondaries in series with the input to simulate voltage increase/decrease of plus/minus 10% etc. It worked fine when I didn't have a variac!

1035. Re: Power supply transformer advice

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-17 00:36:55 UTC
From: brian whatcott <betwys1@sbcglobal.net>
Message-ID: <IrSdnb7179vBGCzXnZ2dnUVZ_uidnZ2d@giganews.com>
Source record: 2438

>> Andy GD1MIP wrote:
>>> Hi I am building a (240volt in) 13.8 volt (out) PSU ...
>>> the transformer must have a secondary of
>>> 16.5 volt. ...
>>> I have a Talema branded toroid ...
>>> Toroidal transformer type 5028-P3S03:
>>> Prim: 0-110V-230V-240V orange-yellow-violet-blue
>>> Sec1: 20V/6A green-red
>>> Sec2: 20V/6A black-white
>>> Sec3: 55V/2,5A braun-braun
>>> If you use only the 2x20V you can get out 9A of each winding (no load
>>> on the 55V)
>>> +++++
>>>...do you think
>>> this transformer will suffice at 20 volts?...

>>> 73 Andy

[brian]
>> Find a 240/50 volt transformer , and wire the 50 volt output in
>> antiphase with the mains input to the target transformer, and don't fool
>> with windings at all....

> [Stan]
> 240 volt input with 55 volts (antiphase) i.e. 'bucking' the 240 input
> is 240 minus 55 = 185 volts. The input voltage being reduced from 240
> to 185 volts. And 185/240 = 0.77

Make that 240 V AC less 50 V AC = 190 V AC input to the toroid.

That would provide 190/240 X 20 volts = 15.83V Close enough.
>
[Stan]
> With that the two remaining secondaries would be 20 x 0.77 = 15.4
> volts. Maybe that's a little bit too low for what is needed? But worth
> a try?
>
> But also if the 55 and 240 windings are connected in series (aiding or
> in-phase) and 240 is applied to that; we could have a 240 + 55 = 295
> winding.
>
> Then with 240 connected to what is now, in effect, a 295 volt winding?
> So 240/295 = 0.81
> And 20 x 0.81 = 16.27 Very close to 16.5?

Well, let's see now. If you choose that rather intriguing approach
of applying its own secondary to buck the input, what might the 20 volts
outputs really become?
240 volts input into a 240 + 55 volt winding pair means that the 240
volt input winding gets 240 / 295 volts, so the outputs would be
(50 V nominal) = 40.7 volts
and
(20 volt nominal) = 16.3 volts

But WAIT: that 50 volt winding does NOT develop 50 volts, but rather
40.7 volts so the 240 V input winding gets 240V - 40.7 volts = 199.3 V
So the 20 Volt output is 199.3/240 volt X 20 V = 16.6 Volts....(or a
smidgeon higher?) This sounds good!
>
[Stan]
> Also' and if NOT with two 6 amp rated secondaries I would certainly
> 'try' getting 9 amps from each of them.
>
> BTW the insulation of any secondary connected in series with the mains
> voltage primary must have adequate insulation to withstand peak mains
> voltages (about 340 v AC). I haven't done this at 140 volts but have
> done it at 120 volts; by connecting 12 volt secondaries in series with
> the input to simulate voltage increase/decrease of plus/minus 10% etc.
> It worked fine when I didn't have a variac!

Actually, with careful wiring, this concern for increased PDs on the
secondaries is unneeded. If the secondary bucking windings are placed
on the neutral end of the supply, then the increase in the peak primary
PD is percentage wise quite small....

In summary, using secondary windings of the SAME transformer to buck the
mains input is a neat idea if you can find the ratios you need, and
doesn't seem to add much risk to the enterprise

Brian W

1036. Re: Power supply transformer advice

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-17 00:46:26 UTC
From: brian whatcott <betwys1@sbcglobal.net>
Message-ID: <EK-dnVIdrMYCGizXnZ2dnUVZ_oSdnZ2d@giganews.com>
Source record: 2439

Andy GD1MIP wrote:
> Hi I am building a (240volt in) 13.8 volt (out) PSU ...
> the transformer must have a secondary of 16.5 volt.

> I have a Talema branded toroid I want to use, its spec is as follows
> (from maker)...
> 73 Andy

Now that the ideas are cooking.... consider this.
1100 watt defunct microwaves can be had for the asking.
They have a particular transformer core design that makes it easy to
saw off the 1 KV secondary, and with the generous core window, you could
wind 18 to 20 turns of wire good for 10 amps. The turns per volt is not
much over 1 tpv.... And you have a decent rectifier diode for the
spares box too....

Admitted - a bandsaw in the workshop makes a 15 minute job out of this
transformer hack.(if you don't nick the primary)

Brian W
KA5WOG

1037. Re: Power supply transformer advice

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-17 14:52:23 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <08f741b1-a4c8-4dcd-b060-d3bc9d8d1118@s6g2000vbp.googlegroups.com>
Source record: 2440

On Sep 16, 8:46 pm, brian whatcott <betw...@sbcglobal.net> wrote:
> Andy GD1MIP wrote:
> > Hi I am building a (240volt in) 13.8 volt (out) PSU ...
>
> > the transformer must have a secondary of 16.5 volt.
>
> > I have a Talema branded toroid I want to use, its spec is as follows
> > (from maker)...
> > 73 Andy
>
> Now that the ideas are cooking.... consider this.
> 1100 watt defunct microwaves can be had for the asking.
>   They have a particular transformer core design that makes it easy to
> saw off the 1 KV secondary, and with the generous core window, you could
> wind 18 to 20 turns of wire good for 10 amps. The turns per volt is not
> much over 1 tpv....   And you have a decent rectifier diode for the
> spares box too....
>
> Admitted - a bandsaw in the workshop makes a 15 minute job out of this
> transformer hack.(if you don't nick the primary)
>
> Brian W
> KA5WOG

Brian, I have done this with old uwave transformers, the ones I could
knock out the magnetic shunt with a hammer and punch, but on the newer
ovens the shunt is a weld. Will these still work?

Jimmie

1038. Re: Power supply transformer advice

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-17 16:55:59 UTC
From: brian whatcott <betwys1@sbcglobal.net>
Message-ID: <jludnW2Noq9l9y_XnZ2dnUVZ_i1i4p2d@giganews.com>
Source record: 2441

JIMMIE wrote:
> On Sep 16, 8:46 pm, brian whatcott <betw...@sbcglobal.net> wrote:
>> Andy GD1MIP wrote:
>>> Hi I am building a (240volt in) 13.8 volt (out) PSU ...
>> > the transformer must have a secondary of 16.5 volt.
>>
>>> I have a Talema branded toroid I want to use, its spec is as follows
>>> (from maker)...
>>> 73 Andy
>> Now that the ideas are cooking.... consider this.
>> 1100 watt defunct microwaves can be had for the asking.
>> They have a particular transformer core design that makes it easy to
>> saw off the 1 KV secondary, and with the generous core window, you could
>> wind 18 to 20 turns of wire good for 10 amps. The turns per volt is not
>> much over 1 tpv.... And you have a decent rectifier diode for the
>> spares box too....
>>
>> Admitted - a bandsaw in the workshop makes a 15 minute job out of this
>> transformer hack.(if you don't nick the primary)
>>
>> Brian W
>> KA5WOG
>
> Brian, I have done this with old uwave transformers, the ones I could
> knock out the magnetic shunt with a hammer and punch, but on the newer
> ovens the shunt is a weld. Will these still work?
>
> Jimmie

I left the magnetic bypass leg in the core on the one I used for a spot
weld source. Its a security blanket against core saturation due to the
magnetron,I reckon.

Brian W

1039. Re: Power supply transformer advice

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-17 22:08:23 UTC
From: Andy GD1MIP <Andy.GD1MIP.4f869e5@radiobanter.com>
Message-ID: <Andy.GD1MIP.4f869e5@radiobanter.com>
Source record: 2442

thanks for all the comments folks. I considered all and decided to take
the learning curve. I was lucky the transformer was only held togethert
by a non sticky clear plastic wrap.
Having unwrapped the windings I took the 55v secondary off completely.
Re the 20v secs, I worked out the value in volts of each turn, then
removed 8 turns from each of the 4 secs. I now have 16.48 volt (near
enough to 16.5 volt for me) I had to re-space the secondary windings
(i did it to look neat - there may be a sound physics reason too).
Lets hope it works. Before the 'surgery' the 20 volt secondaries were
good for 18amp in parallel (according to manufacturer). Tim stated that
lowering the volts to 16 will give 25% more current. so I should be good
for at least 20 amps. I only wanted 15 so the margin is ok.

thanks again folks Andy

+--+
+--+

--
Andy GD1MIP

1040. Re: Power supply transformer advice

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-18 14:37:18 UTC
From: raypsi <rborowiak@gmail.com>
Message-ID: <415d5eb0-8c0a-4202-b09c-27a88cc2da1e@o21g2000vbl.googlegroups.com>
Source record: 2443

On Sep 17, 6:08 pm, Andy GD1MIP <Andy.GD1MIP.4f86...@radiobanter.com>
wrote:
> thanks for all the comments folks. I considered all and decided to take
> the learning curve. I was lucky the transformer was only held togethert
> by a non sticky clear plastic wrap.
> Having unwrapped the windings I took the 55v secondary off completely.
> Re the 20v secs, I worked out the value in volts of each turn, then
> removed 8 turns from each of the 4 secs. I now have 16.48 volt (near
> enough to 16.5 volt for me) I had to re-space the secondary windings
> (i did it to look neat - there may be a sound physics reason too).
> Lets hope it works. Before the 'surgery' the 20 volt secondaries were
> good for 18amp in parallel (according to manufacturer). Tim stated that
> lowering the volts to 16 will give 25% more current. so I should be good
> for at least 20 amps. I only wanted 15 so the margin is ok.
>
> thanks again folks Andy
>
> +---+
> +---+
>
> --
> Andy GD1MIP

Hey OM:

Hope those transistors you are going to use have low SAT otherwise you
are not going to get 13.8 volts.

And I know for a fact the the regulator will have a hard time
regulating that close to the rail. Been there done that. You are going
to need another winding in there to supply the regulator with around
29VDC.

73 OM
de n8zu

1041. Re: Power supply transformer advice

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-18 15:05:31 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <E8-dnQv55fwmPC7XnZ2dnUVZ_o1i4p2d@web-ster.com>
Source record: 2444

On Thu, 17 Sep 2009 11:55:59 -0500, brian whatcott wrote:

> JIMMIE wrote:
>> On Sep 16, 8:46 pm, brian whatcott <betw...@sbcglobal.net> wrote:
>>> Andy GD1MIP wrote:
>>>> Hi I am building a (240volt in) 13.8 volt (out) PSU ...
>>> > the transformer must have a secondary of 16.5 volt.
>>>
>>>> I have a Talema branded toroid I want to use, its spec is as follows
>>>> (from maker)...
>>>> 73 Andy
>>> Now that the ideas are cooking.... consider this. 1100 watt defunct
>>> microwaves can be had for the asking.
>>> They have a particular transformer core design that makes it easy
>>> to
>>> saw off the 1 KV secondary, and with the generous core window, you
>>> could wind 18 to 20 turns of wire good for 10 amps. The turns per volt
>>> is not much over 1 tpv.... And you have a decent rectifier diode for
>>> the spares box too....
>>>
>>> Admitted - a bandsaw in the workshop makes a 15 minute job out of this
>>> transformer hack.(if you don't nick the primary)
>>>
>>> Brian W
>>> KA5WOG
>>
>> Brian, I have done this with old uwave transformers, the ones I could
>> knock out the magnetic shunt with a hammer and punch, but on the newer
>> ovens the shunt is a weld. Will these still work?
>>
>> Jimmie
>
> I left the magnetic bypass leg in the core on the one I used for a spot
> weld source. Its a security blanket against core saturation due to the
> magnetron,I reckon.
>
> Brian W

I _think_ that shunt serves to limit the secondary current and therefore
protect the magnetron.

I should go through the math on that...

--
www.wescottdesign.com

1042. Re: Power supply transformer advice

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-18 15:12:42 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <E8-dnQr55fz3Pi7XnZ2dnUVZ_o1i4p2d@web-ster.com>
Source record: 2445

On Thu, 17 Sep 2009 23:08:23 +0100, Andy GD1MIP wrote:

> thanks for all the comments folks. I considered all and decided to take
> the learning curve. I was lucky the transformer was only held togethert
> by a non sticky clear plastic wrap.
> Having unwrapped the windings I took the 55v secondary off completely.
> Re the 20v secs, I worked out the value in volts of each turn, then
> removed 8 turns from each of the 4 secs. I now have 16.48 volt (near
> enough to 16.5 volt for me) I had to re-space the secondary windings (i
> did it to look neat - there may be a sound physics reason too). Lets
> hope it works. Before the 'surgery' the 20 volt secondaries were good
> for 18amp in parallel (according to manufacturer). Tim stated that
> lowering the volts to 16 will give 25% more current. so I should be good
> for at least 20 amps. I only wanted 15 so the margin is ok.

No no. Tim stated that _after_ you _completely_ rewind the secondaries with wire that's got 25% more cross-sectional area you can run 25% more current. if you increased the secondary current to 20A the per-inch dissipation in the secondary would go up by about 56%; you can probably run more than 16A in the secondaries now because they're more spread out and because the primary will be cooler, but I very much doubt that you can go as high as 20A and maintain the same temperature.

--
www.wescottdesign.com

1043. Re: Power supply transformer advice

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-18 16:50:53 UTC
From: brian whatcott <betwys1@sbcglobal.net>
Message-ID: <6MmdncFDybyHJi7XnZ2dnUVZ_oednZ2d@giganews.com>
Source record: 2446

raypsi wrote:
> On Sep 17, 6:08 pm, Andy GD1MIP <Andy.GD1MIP.4f86...@radiobanter.com>
> wrote:
>> thanks for all the comments folks. I considered all and decided to take
>> the learning curve. I was lucky the transformer was only held togethert
>> by a non sticky clear plastic wrap.
>> Having unwrapped the windings I took the 55v secondary off completely.
>> Re the 20v secs, I worked out the value in volts of each turn, then
>> removed 8 turns from each of the 4 secs. I now have 16.48 volt (near
>> enough to 16.5 volt for me) I had to re-space the secondary windings
>> (i did it to look neat - there may be a sound physics reason too).
>> Lets hope it works. Before the 'surgery' the 20 volt secondaries were
>> good for 18amp in parallel (according to manufacturer). Tim stated that
>> lowering the volts to 16 will give 25% more current. so I should be good
>> for at least 20 amps. I only wanted 15 so the margin is ok.
>>
>> thanks again folks Andy
>>
>> +---+
>> +---+
>>
>> --
>> Andy GD1MIP
>
> Hey OM:
>
> Hope those transistors you are going to use have low SAT otherwise you
> are not going to get 13.8 volts.
>
> And I know for a fact the the regulator will have a hard time
> regulating that close to the rail. Been there done that. You are going
> to need another winding in there to supply the regulator with around
> 29VDC.
>
> 73 OM
> de n8zu

It's certainly possible you know better than the original designer - and
that the power transistors he specified need more than 16.5VAC X 1.414
(to peak DC) less 13.8VDC output - that's a max headroom of 9.5 volts
DC. But perhaps you were taking the input AC value for the input DC .
It's all I can think of....

Brian W

1044. Re: Power supply transformer advice

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-18 16:53:07 UTC
From: brian whatcott <betwys1@sbcglobal.net>
Message-ID: <6MmdncBDybw9Ji7XnZ2dnUVZ_odi4p2d@giganews.com>
Source record: 2447

Tim Wescott wrote:
>>>> .... 1100 watt defunct microwaves can be had for the asking.
>>>> They have a particular transformer core design that makes it easy
>>>> to saw off the 1 KV secondary, and with the
>>>> generous core window, you
>>>> could wind 18 to 20 turns of wire good for 10 amps. The turns per volt
>>>> is not much over 1 tpv.... And you have a decent rectifier diode for
>>>> the spares box too....
>>>>
>>>> Admitted - a bandsaw in the workshop makes a 15 minute job out of this
>>>> transformer hack.(if you don't nick the primary)
>>>>
>>>> Brian W
>>>> KA5WOG

>>> Brian, I have done this with old uwave transformers, the ones I could
>>> knock out the magnetic shunt with a hammer and punch, but on the newer
>>> ovens the shunt is a weld. Will these still work?
>>>
>>> Jimmie
>> I left the magnetic bypass leg in the core on the one I used for a spot
>> weld source. Its a security blanket against core saturation due to the
>> magnetron,I reckon.
>>
>> Brian W
>
> I _think_ that shunt serves to limit the secondary current and therefore
> protect the magnetron.

I agree....

Brian W

1045. Re: Antenna advice?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-19 20:39:53 UTC
From: Kenneth Scharf <wa2mze@bellsouth.net>
Message-ID: <h93fe3$n7n$1@news.eternal-september.org>
Source record: 2448

JB wrote:
> "Kenneth Scharf" <wa2mze@bellsouth.net> wrote in message
> news:h8jgdtcuf1@news.eternal-september.org...
>> JB wrote:
>>> A 4btv trap vertical or the like would be a different matter, requiring
> some
>>> fiddling. A Yagi and (or) G5RV would require a minimum of fiddling. A
>>> ladder line fed homemade G5RV in inverted vee would be the least
> expensive I
>>> could think of. A used 3 element Yagis can be cleaned up and re-used
>>> later..
>>>
>>> The trap vertical that was mentioned would probably be a real hassle to
>>> tune-up on the tower.
>>>
>> The GAP Titan can be dumped out of the box, assembled (use a tape
>> measure to get everything as per the manual) and put up without ANY
>> fooling around. You *MIGHT* have to make a minor adjustment to get the
>> 80 and 40 meter bands right with the lowest SWR centered in the middle
>> of the band segment that you operate most, but mine came out perfect
>> using the factory directions.
>
> You are telling me that the measurements are the same for tower mounting?
>
I'd have to dig up the instruction manual to see what they have to say
on that. However I do remember assembling it according to the
measurements given in the manual and the antenna worked fine mounted
with the bottom at eye level with me standing on roof. The antenna was
mounted on a mast strapped to the side of the house. I now have the
antenna mounted at the same height, but using the GAP tiltover mount
hardware attached to a short length of Rohn #25 tower against the side
of the house. I don't think the GAP Titan is very sensitive to height
above ground, at least as far as tuning is concerned. Angle of
radiation is probably another story....

1046. Re: Power supply transformer advice

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-19 21:43:28 UTC
From: Kenneth Scharf <wa2mze@bellsouth.net>
Message-ID: <h93j59hdc1@news.eternal-september.org>
Source record: 2449

Andy GD1MIP wrote:
> Hi I am building a (240volt in) 13.8 volt (out) PSU along the lines of
> this plan..
> http://www.warc.org.uk/proj_psu.php it is very similar to the old
> Marchwood practical wireless unit from the early 1980's using 2n3055
> transistors.
>
> My question. The spec says the transformer must have a secondary of
> 16.5 volt. Now when I last built a PSU using a similar plan the
> transformer output could be much higher, in the region of 15 to 20
> volts.
>
> I have a Talema branded toroid I want to use, its spec is as follows
> (from maker)
> +++++
> Toroidal transformer type 5028-P3S03:
> Prim: 0-110V-230V-240V orange-yellow-violet-blue
> Sec1: 20V/6A green-red
> Sec2: 20V/6A black-white
> Sec3: 55V/2,5A braun-braun
> If you use only the 2x20V you can get out 9A of each winding (no load
> on the 55V)
> +++++
>
>
> as you can see the secondary output is 20 volt, now folks do you think
> this transformer will suffice at 20 volts, or should I removed a little
> winding to bring it down?
>
> 73 Andy
>
> PS the variac is just there for scale.
>
>
>
>
Is this transformer potted in the middle?
If it isn't you could add some turns and connect them in series with the
primary to reduce the secondary voltages. This would be a lot easier
than removing turns from the secondaries, especially if the secondaries
are NOT wound on top!

1047. Re: Power supply transformer advice

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-20 07:56:55 UTC
From: Andrew VK3BFA <VK3BFA@wia.org.au>
Message-ID: <9f72c62c-a09d-408d-a7c1-a863a89adaed@m3g2000pri.googlegroups.com>
Source record: 2450

On Sep 20, 7:43 am, Kenneth Scharf <wa2...@bellsouth.net> wrote:
> Andy GD1MIP wrote:
> > Hi I am building a (240volt in) 13.8 volt (out) PSU along the lines of
> > this plan..
>
OK, we are all being technical here - can I ask if the crowbar IC is
still available? Is the specified relay still available?

At an overvoltage condition,there will be over 200 watts being
dissipated in the 2r2 resistor in series with the SCR - hopefully it
wont instantaneously go open circuit....if the overvoltage protection
works, wont the thing go into cyclic oscillation as it attempts to
restart?....(not sure here, perhaps the gate never goes low enough for
this)
LM723 regulators tend to be a bit unstable - VHF ground plane type
construction is recommended.
The transformer ratings - the manufacturer rates them at a specified
current for a reason. For low duty cycle use, eg SSB, you can get away
with pulling more current. But a solid state Class C FM amplifier? -
also, as mentioned, there is very little headroom at 16v - 18v would
be better.....and thats assuming the mains input voltage is reference
quality - here in OZ, its a design variable, up to 20% fluctuations
are not uncommon, especially at the end of a long run.
Motorola 2N3055 transistors are fine - BUT- when the original Motorola
patents expired, and Motorola stopped making them, a lot of
substandard crappy ones (typically Eastern European) came onto the
market. Be warned, they can be unpredictable. TO3 is a pretty well
obsolete case style anyway. Good luck. And the Motorola symbol was
widely forged as well.

The above, of course, are my Neanderthal rantings on a newsgroup and
will no doubt start an impassioned debate on points of theory , or
maths, or how it was done in 1935. Remember, free advice is worth what
you pay for it.

But I would advise putting a 5w 15V zener across the output terminals,
and before that put a 30amp fuse. Minimal cost for added insurance.

Go for it - build it, experiment. Blowing something up is always a
fantastic spur to learn the correct theory for the application..if it
works first up, then its just a mechanical exercise.

Andrew VK3BFA.

1048. spurious radiadtion

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-20 13:54:48 UTC
From: electricksparks <comtrol.kaska1@gmail.com>
Message-ID: <f197aae3-7ea8-42d4-8aa0-760d32d834f7@f10g2000vbf.googlegroups.com>
Source record: 2451

I drive a 1988 dodge dakota which has an electronic control module to control timing and fuel delivery.I've installed a 10/12m ranger 2970 radio in it.I've also modified the radio somewhat by installing a modulation/speech processor/compressor.My modulation is presently at 95%.When I key the mic. the ECM becomes flooded with RF and disturbs the control to the fuel delivery and timing to the point of stalling the the truck.I've tried to RF harden the ECM by wrapping it in tin foil.I'e also added a DC ground that runs from the radio to ground and to the antenna then back to the truck ground.Still the problem exists.Any suggestions short of removing the speech/mod compressor will be greatly appreciated. 73s...K2NBO....

1049. Re: spurious radiation

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-20 17:18:29 UTC
From: brian whatcott <betwys1@sbcglobal.net>
Message-ID: <-JydnWmP_LBE-SvXnZ2dnUVZ_qKdnZ2d@giganews.com>
Source record: 2452

electricksparks wrote:
> I drive a 1988 dodge dakota which has an electronic control module to
> control timing and fuel delivery.I've installed a 10/12m ranger 2970
> radio in it.I've also modified the radio somewhat by installing a
> modulation/speech processor/compressor.My modulation is presently at
> 95%.When I key the mic. the ECM becomes flooded with RF and disturbs
> the control to the fuel delivery and timing to the point of stalling
> the the truck.I've tried to RF harden the ECM by wrapping it in tin
> foil.I'e also added a DC ground that runs from the radio to ground and
> to the antenna then back to the truck ground.Still the problem
> exists.Any suggestions short of removing the speech/mod compressor
> will be greatly appreciated. 73s...K2NBO....

Off the top. If the trouble started after the compressor was added, it
might just be that current spikes from the radio are getting to the ECM.
A choke and bypass right at the radio power input lead might fix it...

Brian W

1050. Re: spurious radiadtion

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-20 17:40:59 UTC
From: Bill M <radioexray@geeeeeemail.com>
Message-ID: <h95pfe02fos@news1.newsguy.com>
Source record: 2453

electricksparks wrote:
> I've installed a 10/12m ranger 2970
> radio in it.I've also modified the radio somewhat by installing a
> modulation/speech processor/compressor.My modulation is presently at
> 95%. 73s...K2NBO....

K2NBO seems to be a fake callsign?

1051. Re: spurious radiadtion

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-20 17:49:09 UTC
From: Dale Parfitt <parinc1@verizon.net>
Message-ID: <pWttm.3068$tl3.1180@nwrddc01.gnilink.net>
Source record: 2454

"Bill M" <radioexray@geeeeeemail.com> wrote in message
news:h95pfe02fos@news1.newsguy.com...
> electricksparks wrote:
>> I've installed a 10/12m ranger 2970
>> radio in it.I've also modified the radio somewhat by installing a
>> modulation/speech processor/compressor.My modulation is presently at
>> 95%. 73s...K2NBO....
>
> K2NBO seems to be a fake callsign?

I think the give away was the speech compressor and 95% modulation.

1052. new gruop four U

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-20 18:35:09 UTC
From: kb9rqz <kb9rqz@puncegotcha.com>
Message-ID: <4ab675ef@x-privat.org>
Source record: 2455
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.shortwave

I has indeed craeted a miror policy gruop where the non-ameateur related
post will indeed be deleted.
For tohse who may has an interest indeed Feel free to visit/subcribe/use
teh site.

http://groups.google.com/group/rec-radio-amateur-radio?hl=en

I punce a moronatated blog from teh ham radio that happenens to indeed be Bi
sexaul kinky
http://kb9rqz.blogspot.com/

show-na-two-va (pohnetically speeled)

1053. shonatovah

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-20 23:00:20 UTC
From: kb9rqz <mark@kb9rqz.com>
Message-ID: <c8db1f89-2af7-48af-bb6f-384ec26e9c23@g6g2000vbr.googlegroups.com>
Source record: 2456
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.shortwave

On Sep 20, 2:35 pm, "kb9rqz" <kb9...@puncegotcha.com> wrote:
> I
fake

1054. Re: spurious radiadtion

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-21 16:07:31 UTC
From: JB <nospam@goofball.net>
Message-ID: <7xNtm.3131$tl3.2111@nwrddc01.gnilink.net>
Source record: 2457

"Dale Parfitt" <parinc1@verizon.net> wrote in message
news:pWttm.3068$tl3.1180@nwrddc01.gnilink.net...
>
> "Bill M" <radioexray@geeeeeemail.com> wrote in message
> news:h95pfe02fos@news1.newsguy.com...
> > electricksparks wrote:
> >> I've installed a 10/12m ranger 2970
> >> radio in it.I've also modified the radio somewhat by installing a
> >> modulation/speech processor/compressor.My modulation is presently at
> >> 95%. 73s...K2NBO....
> >
> > K2NBO seems to be a fake callsign?
>
> I think the give away was the speech compressor and 95% modulation.
>
Modulation and power mods by universally shady mod techs usually buys you a
steaming pile of crap, broken warranty, and only serves to call every one on
the band to your channel. Eleven meters is heavily populated by suckers
whose main goal in life is to try to get something for nothing.

1055. coils : turns shorted = quality ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-24 07:15:59 UTC
From: Tomylavitesse <pas@free.fr>
Message-ID: <4abb1caf$0$17779$ba4acef3@news.orange.fr>
Source record: 2458

HI,

Often I can see coils where some turns are shorted in order to modify there value.
I wonder whether these shorted turns would not be seen as a short cicuit and could decrease the quality of that coil.
How can I have an idea of the lost of quality without complex equipment ?
I plan to build this kind of coil for a shortened antenna...

regards

1056. Re: coils : turns shorted = quality ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-25 05:33:45 UTC
From: coffelt2 <coffelt2@comcast.net>
Message-ID: <8bCdnRMVcd3cyyHXnZ2dnUVZ_qidnZ2d@giganews.com>
Source record: 2459

"Tomylavitesse" <pas@free.fr> wrote in message
news:4abb1caf$0$17779$ba4acef3@news.orange.fr...
> HI,
>
> Often I can see coils where some turns are shorted in order to modify
> there value.
> I wonder whether these shorted turns would not be seen as a short cicuit
> and could decrease the quality of that coil.
> How can I have an idea of the lost of quality without complex equipment ?
> I plan to build this kind of coil for a shortened antenna...
>
> regards
>
Good question! I've always wondered about that too. In a former life as a
marine electronics technician, the old marine "AM" transmitter antenna
tuners uses shorted turns a lot. It always sort of went against the grain, I
thought, but in practice, it seemed to work ok. What was I missing here?
Old Chief Lynn, W7LTQ and some commercials with endorsements

1057. Re: coils : turns shorted = quality ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-25 06:28:21 UTC
From: dplatt@radagast.org
Message-ID: <5h4uo6-q9o.ln1@radagast.org>
Source record: 2460

In article <8bCdnRMVcd3cyyHXnZ2dnUVZ_qidnZ2d@giganews.com>,
coffelt2 <coffelt2@comcast.net> wrote:

>Good question! I've always wondered about that too. In a former life as a
>marine electronics technician, the old marine "AM" transmitter antenna
>tuners uses shorted turns a lot. It always sort of went against the grain, I
>thought, but in practice, it seemed to work ok. What was I missing here?
>Old Chief Lynn, W7LTQ and some commercials with endorsements

My understanding is that the presence of the shorted turns in the coil
does lower the Q of the coil somewhat. If the loaded Q of the
system/application is already low enough, the reduction in coil Q
doesn't result in an unacceptable increase in losses.

The alternative, in some cases, is to leave the unused turns open at
one end. This isn't always possible, and when it is possible it can
have an unfortunate side effect. Autotransformer action can cause the
open end of the turns to develop a high voltage relative to the rest
of the system, and there can be arcing to nearby points of lower
potential. Could make a mess of the inside of your transmatch :-(

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1058. Re: coils : turns shorted = quality ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-25 15:44:24 UTC
From: Dave M <masondg4499@comcast.net>
Message-ID: <atOdnWozsdbFeCHXnZ2dnUVZ_gSdnZ2d@giganews.com>
Source record: 2461

coffelt2 wrote:
> "Tomylavitesse" <pas@free.fr> wrote in message
> news:4abb1caf$0$17779$ba4acef3@news.orange.fr...
>> HI,
>>
>> Often I can see coils where some turns are shorted in order to modify
>> there value.
>> I wonder whether these shorted turns would not be seen as a short
>> cicuit and could decrease the quality of that coil.
>> How can I have an idea of the lost of quality without complex
>> equipment ? I plan to build this kind of coil for a shortened
>> antenna... regards
>>
> Good question! I've always wondered about that too. In a former life
> as a marine electronics technician, the old marine "AM" transmitter
> antenna tuners uses shorted turns a lot. It always sort of went
> against the grain, I thought, but in practice, it seemed to work ok.
> What was I missing here? Old Chief Lynn, W7LTQ and some commercials
> with endorsements

In many military antenna tuners, the variable inductor inside the tuner was open on one end. The coil was rotated such that the length of the coil winding was changed, or the position of the tap was changed to effect the tuning. There were also some tuners that spooled one end of the coil onto a grounded metal drum. The mechanism changed the effective length of the coil, but did not introduce any shorted turns.
--
David
masondg44 at comcast dot net

1059. Re: coils : turns shorted = quality ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-25 23:26:40 UTC
From: Kenneth Scharf <wa2mze@bellsouth.net>
Message-ID: <h9jjeaors1@news.eternal-september.org>
Source record: 2462

Tomylavitesse wrote:
> HI,
>
> Often I can see coils where some turns are shorted in order to modify there
> value.
> I wonder whether these shorted turns would not be seen as a short cicuit and
> could decrease the quality of that coil.
> How can I have an idea of the lost of quality without complex equipment ?
> I plan to build this kind of coil for a shortened antenna...
>
> regards
>
>
If the shorted turns are connected to one end of the coil then the total
shorted turns would appear as the final turn of the coil. In amateur
transmitters the band switch often shorts turns from the cold end of the
tank coil as one switches to higher frequency bands. The shorted turns
simply are not in the circuit I guess.

1060. Re: coils : turns shorted = quality ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-26 07:17:51 UTC
From: rtfm <rtfm@invalid.invalid>
Message-ID: <vpr0p6-e68.ln1@nntp.rtfm.ad>
Source record: 2463

On 2009-09-24, Tomylavitesse <pas@free.fr> wrote:
> HI,
>
> Often I can see coils where some turns are shorted in order to modify there
> value.
> I wonder whether these shorted turns would not be seen as a short cicuit and
> could decrease the quality of that coil.
> How can I have an idea of the lost of quality without complex equipment ?
> I plan to build this kind of coil for a shortened antenna...

The circuit to shorten turns in such environments has to be very low loss. Otherwise you will have lots of power lost in this short circiuted parts of the coil. And in PA / antenna environments you always have power. This is why switches are always "heavy duty" in PA and antenna switching units.

If you do so, the current in this shortened turns is a complex current. And as you know, complex currents do not consume power. Only the real parts of current do.

This is totally different from the situation e.g. in a power transformator. If you would shorten turns there, you would have power loss, because the resistant of the turns in power transformators has a much higher real part compared with rf coils in PA / antenna units.

OK?

1061. Re: coils : turns shorted = quality ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-27 03:25:30 UTC
From: brian whatcott <betwys1@sbcglobal.net>
Message-ID: <HZ6dnfAJGKv6RiPXnZ2dnUVZ_rOdnZ2d@giganews.com>
Source record: 2464

rtfm wrote:
> On 2009-09-24, Tomylavitesse <pas@free.fr> wrote:
>> HI,
>>
>> Often I can see coils where some turns are shorted in order to modify there
>> value.
>> I wonder whether these shorted turns would not be seen as a short cicuit and
>> could decrease the quality of that coil.
>> How can I have an idea of the lost of quality without complex equipment ?
>> I plan to build this kind of coil for a shortened antenna...
>
> The circuit to shorten turns in such environments has to be very low
> loss. Otherwise you will have lots of power lost in this short
> circiuted parts of the coil. And in PA / antenna environments you
> always have power. This is why switches are always "heavy duty" in PA
> and antenna switching units.
>
> If you do so, the current in this shortened turns is a complex
> current. And as you know, complex currents do not consume power. Only
> the real parts of current do.
>
> This is totally different from the situation e.g. in a power
> transformator. If you would shorten turns there, you would have power
> loss, because the resistant of the turns in power transformators has a
> much higher real part compared with rf coils in PA / antenna units.
>
> OK?

This seemed like an insightful response - but not one with universal appeal.

Let me try embroidering on this theme a little more....

The leakage path for current in an insulated wire is strikingly
different from the leakage path in a magnetic conductor - usually called
a core or stamping.
The leakage resistance can easily be 1000 megohms compared to the
conductor's resistance of (say) 1 ohm. A ratio of a billion to one.
The leakage path for cores and stampings is lucky to be a thousand times
more "resistive" than the path through the core - if it's an iron
stamping, an iron dust core, or a ferrite core. A ratio of a thousand to
one.
For air cored coils, the leakage path is lower still, so that the
magnetic path does not couple all turns together at the best of times.

If an end turn or two is shorted, the reactive current in the shorted turn pinches off most of the magnetic coupling from the remaining coil altogether, so the effect is not as dramatic as we might expect. Waddaya think of that?

Brian W

1062. Re: coils : turns shorted = quality ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-27 03:32:50 UTC
From: coffelt2 <coffelt2@comcast.net>
Message-ID: <lYGdnWroPvB7QSPXnZ2dnUVZ_oOdnZ2d@giganews.com>
Source record: 2465

"brian whatcott" <betwys1@sbcglobal.net> wrote in message
news:HZ6dnfAJGKv6RiPXnZ2dnUVZ_rOdnZ2d@giganews.com...
> rtfm wrote:
>> On 2009-09-24, Tomylavitesse <pas@free.fr> wrote:
>>> HI,
>>>
>>> Often I can see coils where some turns are shorted in order to modify
>>> there value.
>>> I wonder whether these shorted turns would not be seen as a short cicuit
>>> and could decrease the quality of that coil.
>>> How can I have an idea of the lost of quality without complex equipment
>>> ?
>>> I plan to build this kind of coil for a shortened antenna...
>>
>> The circuit to shorten turns in such environments has to be very low
>> loss. Otherwise you will have lots of power lost in this short
>> circiuted parts of the coil. And in PA / antenna environments you
>> always have power. This is why switches are always "heavy duty" in PA
>> and antenna switching units.
>>
>> If you do so, the current in this shortened turns is a complex
>> current. And as you know, complex currents do not consume power. Only
>> the real parts of current do.
>>
>> This is totally different from the situation e.g. in a power
>> transformator. If you would shorten turns there, you would have power
>> loss, because the resistant of the turns in power transformators has a
>> much higher real part compared with rf coils in PA / antenna units.
>>
>> OK?
>
> This seemed like an insightful response - but not one with universal
> appeal.
>
> Let me try embroidering on this theme a little more....
>
> The leakage path for current in an insulated wire is strikingly different
> from the leakage path in a magnetic conductor - usually called a core or
> stamping.
> The leakage resistance can easily be 1000 megohms compared to the
> conductor's resistance of (say) 1 ohm. A ratio of a billion to one.
> The leakage path for cores and stampings is lucky to be a thousand times
> more "resistive" than the path through the core - if it's an iron
> stamping, an iron dust core, or a ferrite core. A ratio of a thousand to

> one.
> For air cored coils, the leakage path is lower still, so that the magnetic
> path does not couple all turns together at the best of times.
>
> If an end turn or two is shorted, the reactive current in the shorted turn
> pinches off most of the magnetic coupling from the remaining coil
> altogether, so the effect is not as dramatic as we might expect.
> Waddaya think of that?
>
> Brian W

Wooo hoooooo, now we're cookin'

Old Chief Lynn

1063. Re: coils : turns shorted = quality ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-27 08:37:03 UTC
From: rtfm <rtfm@invalid.invalid>
Message-ID: <fqk3p6-8b.ln1@nntp.rtfm.ad>
Source record: 2466

On 2009-09-27, brian whatcott <betwys1@sbcglobal.net> wrote:
> ...
> The leakage path for current in an insulated wire is strikingly
> different from the leakage path in a magnetic conductor - usually called
> a core or stamping.
> The leakage resistance can easily be 1000 megohms compared to the
> conductor's resistance of (say) 1 ohm. A ratio of a billion to one.
> The leakage path for cores and stampings is lucky to be a thousand times
> more "resistive" than the path through the core - if it's an iron
> stamping, an iron dust core, or a ferrite core. A ratio of a thousand to
> one.
> For air cored coils, the leakage path is lower still, so that the
> magnetic path does not couple all turns together at the best of times.
>
> If an end turn or two is shorted, the reactive current in the shorted
> turn pinches off most of the magnetic coupling from the remaining coil
> altogether, so the effect is not as dramatic as we might expect.
> Waddaya think of that?

Thanks for this posting. You are totally right. I tried to explain
thinks a little more easier. And if you try to reduce complexity in an
explanation, you have to simplyfy. Looks like I simplyfied too much.
My fault.

1064. Re: coils : turns shorted = quality ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-27 09:17:16 UTC
From: Tomylavitesse <pas@free.fr>
Message-ID: <4abf2d9c$0$12623$ba4acef3@news.orange.fr>
Source record: 2467

Hi,
Thanks everybody.
I just found your answers, so I will work with them.
I've also found some other info on my old handbook ARRL.
Thanks again

Raph

1065. Re: coils : turns shorted = quality ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-27 11:19:51 UTC
From: rtfm <rtfm@invalid.invalid>
Message-ID: <nbu3p6-f94.ln1@nntp.rtfm.ad>
Source record: 2469

On 2009-09-27, Tomylavitesse <pas@free.fr> wrote:
> Hi,
> Thanks everybody.
> I just found your answers, so I will work with them.
> I've also found some other info on my old handbook ARRL.

Worlds best HAM tech source!

1066. Re: coils : turns shorted = quality ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-27 19:17:22 UTC
From: coffelt2 <coffelt2@comcast.net>
Message-ID: <PqOdnV387ZfYJyLXnZ2dnUVZ_judnZ2d@giganews.com>
Source record: 2468

"rtfm" <rtfm@invalid.invalid> wrote in message
news:fqk3p6-8b.ln1@nntp.rtfm.ad...
> On 2009-09-27, brian whatcott <betwys1@sbcglobal.net> wrote:
>> ...
>> The leakage path for current in an insulated wire is strikingly
>> different from the leakage path in a magnetic conductor - usually called
>> a core or stamping.
>> The leakage resistance can easily be 1000 megohms compared to the
>> conductor's resistance of (say) 1 ohm. A ratio of a billion to one.
>> The leakage path for cores and stampings is lucky to be a thousand times
>> more "resistive" than the path through the core - if it's an iron
>> stamping, an iron dust core, or a ferrite core. A ratio of a thousand to
>> one.
>> For air cored coils, the leakage path is lower still, so that the
>> magnetic path does not couple all turns together at the best of times.
>>
>> If an end turn or two is shorted, the reactive current in the shorted
>> turn pinches off most of the magnetic coupling from the remaining coil
>> altogether, so the effect is not as dramatic as we might expect.
>> Waddaya think of that?
>
> Thanks for this posting. You are totally right. I tried to explain
> thinks a little more easier. And if you try to reduce complexity in an
> explanation, you have to simplyfy. Looks like I simplyfied too much.
> My fault.

No, no, no..... your explanation was right on the mark! Many of us
thoroughly enjoyed your reduction of
imaginary numbers and such into a down-to-earth, homebrew response. Well
done!

Old Chief Lynn

1067. Re: coils : turns shorted = quality ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-28 05:28:33 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <2ccc29ad-433d-4567-b25d-f734d127c5d4@k13g2000prh.googlegroups.com>
Source record: 2470
Body handling: HTML body converted to readable text

On Sep 26, 8:25 pm, brian whatcott wrote:
> rtfm wrote:
> > On 2009-09-24, Tomylavitesse wrote:
> >> HI,
>
> >> Often I can see coils where some turns are shorted in order to modify there
> >> value.
> >> I wonder whether these shorted turns would not be seen as a short cicuit and
> >> could decrease the quality of that coil.
> >> How can I have an idea of the lost of quality without complex equipment ?
> >> I plan to build this kind of coil for a shortened antenna...
>
> > The circuit to shorten turns in such environments has to be very low
> > loss. Otherwise you will have lots of power lost in this short
> > circiuted parts of the coil. And in PA / antenna environments you
> > always have power. This is why switches are always "heavy duty" in PA
> > and antenna switching units.
>
> > If you do so, the current in this shortened turns is a complex
> > current. And as you know, complex currents do not consume power. Only
> > the real parts of current do.
>
> > This is totally different from the situation e.g. in a power
> > transformator. If you would shorten turns there, you would have power
> > loss, because the resistant of the turns in power transformators has a
> > much higher real part compared with rf coils in PA / antenna units.
>
> > OK?
>
> This seemed like an insightful response - but not one with universal appeal.
>
> Let me try embroidering on this theme a little more....
>
> The leakage path for current in an insulated wire is strikingly
> different from the leakage path in a magnetic conductor - usually called
> a core or stamping.
> The leakage resistance can easily be 1000 megohms compared to the
> conductor's resistance of (say) 1 ohm. A ratio of a billion to one.
> The leakage path for cores and stampings is lucky to be a thousand times
> more "resistive" than the path through the core - if it's an iron
> stamping, an iron dust core, or a ferrite core. A ratio of a thousand to
> one.
> For air cored coils, the leakage path is lower still, so that the

> magnetic path does not couple all turns together at the best of times.
>
> If an end turn or two is shorted, the reactive current in the shorted
> turn pinches off most of the magnetic coupling from the remaining coil
> altogether, so the effect is not as dramatic as we might expect.
> Waddaya think of that?
>
> Brian W

It's actually not too difficult to come up with a reasonably accurate model that you can then analyze...for example, you can put it into Spice and look at the losses, the lowering of Q, etc.

What I've done to build the model is to consider that the shorted turns are one coil and the remainder of the turns are another. Before those turns are shorted, each of those two coils (that happen to form one coil) has a self-inductance, and when they are put end-to-end to form the one coil, they then also have mutual inductance. You can use your favorite coil inductance calculator to find the inductance of each of the two individual coils, and the net single coil composed of those two. Those three inductances let you calculate the mutual inductance (or the coupling coefficient), and that's the core of the model. You can add in the RF resistance of each coil: there are various ways to get a good estimate of the Qu, and from that you can get the RF resistance at the operating frequency.

If this is too muddy, I could offer a specific example...

Cheers,
Tom

1068. LOTS OF ANTIQUE RADIO THINGS. dialcover.com

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-28 14:36:02 UTC
From: dialcover@webtv.net
Message-ID: <23275-4AC0C9D2-4242@storefull-3172.bay.webtv.net>
Source record: 2471

WA0ABI

CHECK MY WEBSITE: www.dialcover.com
Bill Turner, excuse caps, short answers, stroke.

1069. Re: coils : turns shorted = quality ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-28 23:15:22 UTC
From: Peter Dettmann <peter@aardvark.net.au>
Message-ID: <8jg2c5pvagfacdg8ds8t8b61t2qk4ntenb@4ax.com>
Source record: 2472
Body handling: HTML body converted to readable text

On Sun, 27 Sep 2009 22:28:33 -0700 (PDT), K7ITM wrote:

>On Sep 26, 8:25ï¿½pm, brian whatcott wrote:
>> rtfm wrote:
>> > On 2009-09-24, Tomylavitesse wrote:
>> >> HI,
>> > OK?

As well, it would be interesting to see the effect of stray capacitance, as the reason for shorting unused turns is to reduce the problem of stray capacitance and the inductance having unwanted parasitic resonances in the system, That is why shorting unused sections is normally advocated.

Peter Dettmann

1070. Re: coils : turns shorted = quality ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-28 23:33:12 UTC
From: Bill M <radioexray@geeeemail.com>
Message-ID: <h9rh3n0gma@news2.newsguy.com>
Source record: 2473
Body handling: HTML body converted to readable text

Peter Dettmann wrote:
> On Sun, 27 Sep 2009 22:28:33 -0700 (PDT), K7ITM wrote:
>
>> On Sep 26, 8:25 pm, brian whatcott wrote:
>>> rtfm wrote:
>>>> On 2009-09-24, Tomylavitesse wrote:
>>>>> HI,
>>>> OK?
>
>
>
> As well, it would be interesting to see the effect of stray
> capacitance, as the reason for shorting unused turns is to reduce the
> problem of stray capacitance and the inductance having unwanted
> parasitic resonances in the system, That is why shorting unused
> sections is normally advocated.
>
> Peter Dettmann
>
>
Well, its the better of the options but the Q of the 'desired' coil
still takes a hit because of that nearby lump of copper.

It works out ok in practice, though.

-Bill

1071. Re: coils : turns shorted = quality ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-29 22:03:40 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <2eebd517-8fca-461d-a979-91674bbdaa76@j4g2000yqa.googlegroups.com>
Source record: 2474
Body handling: HTML body converted to readable text

On Sep 27, 10:28 pm, K7ITM wrote:
> On Sep 26, 8:25 pm, brian whatcott wrote:
>
>
>
> > rtfm wrote:
> > > On 2009-09-24, Tomylavitesse wrote:
> > >> HI,
>
> > >> Often I can see coils where some turns are shorted in order to modify there
> > >> value.
> > >> I wonder whether these shorted turns would not be seen as a short cicuit and
> > >> could decrease the quality of that coil.
> > >> How can I have an idea of the lost of quality without complex equipment ?
> > >> I plan to build this kind of coil for a shortened antenna...
>
> > > The circuit to shorten turns in such environments has to be very low
> > > loss. Otherwise you will have lots of power lost in this short
> > > circiuted parts of the coil. And in PA / antenna environments you
> > > always have power. This is why switches are always "heavy duty" in PA
> > > and antenna switching units.
>
> > > If you do so, the current in this shortened turns is a complex
> > > current. And as you know, complex currents do not consume power. Only
> > > the real parts of current do.
>
> > > This is totally different from the situation e.g. in a power
> > > transformator. If you would shorten turns there, you would have power
> > > loss, because the resistant of the turns in power transformators has a
> > > much higher real part compared with rf coils in PA / antenna units.
>
> > > OK?
>
> > This seemed like an insightful response - but not one with universal appeal.
>
> > Let me try embroidering on this theme a little more....
>
> > The leakage path for current in an insulated wire is strikingly
> > different from the leakage path in a magnetic conductor - usually called
> > a core or stamping.
> > The leakage resistance can easily be 1000 megohms compared to the
> > conductor's resistance of (say) 1 ohm. A ratio of a billion to one.
> > The leakage path for cores and stampings is lucky to be a thousand times

> > more "resistive" than the path through the core - if it's an iron
> > stamping, an iron dust core, or a ferrite core. A ratio of a thousand to
> > one.
> > For air cored coils, the leakage path is lower still, so that the
> > magnetic path does not couple all turns together at the best of times.
>
> > If an end turn or two is shorted, the reactive current in the shorted
> > turn pinches off most of the magnetic coupling from the remaining coil
> > altogether, so the effect is not as dramatic as we might expect.
> > Waddaya think of that?
>
> > Brian W
>
> It's actually not too difficult to come up with a reasonably accurate
> model that you can then analyze...for example, you can put it into
> Spice and look at the losses, the lowering of Q, etc.
>
> What I've done to build the model is to consider that the shorted
> turns are one coil and the remainder of the turns are another. Before
> those turns are shorted, each of those two coils (that happen to form
> one coil) has a self-inductance, and when they are put end-to-end to
> form the one coil, they then also have mutual inductance. You can use
> your favorite coil inductance calculator to find the inductance of
> each of the two individual coils, and the net single coil composed of
> those two. Those three inductances let you calculate the mutual
> inductance (or the coupling coefficient), and that's the core of the
> model. You can add in the RF resistance of each coil: there are
> various ways to get a good estimate of the Qu, and from that you can
> get the RF resistance at the operating frequency.
>
> If this is too muddy, I could offer a specific example...
>
> Cheers,
> Tom

So, just for fun I ran an analysis this way...
I asked the Hamwaves on-line inductance calculator about three coils,
all 2.5mm wire, 5mm pitch, 75mm mean coil diameter, default copper
wire. You can put effective shunt capacitances into the model too,
but I didn't in this case. The test frequency is 10.0MHz. These are
the "lumped equivalent" values.

L1: 13 turns 65mm long --> 9.272uH, 0.491 ohms, Qu=1187
L2: 17 turns 85mm long --> 13.191uH, 0.646 ohms, Qu=1283
L3 (L1 and L2 end to end): 30t, 150mm --> 26.600uH, 0.880 ohms,
Qu=1899
(My impression is that the RF resistance and Qu calculation yields Qu
that's a bit too high, but that's what the calculator says...)

From these, I calculate the mutual inductance. L1+L2+2*M = L3, so
M=2.0685uH. Coupling coefficient equals M/sqrt(L1*L2), or 0.187.

I put L1 and L2 and their respective RF resistances in series in Spice, with a resistance representing a shorting switch across L2. Note that this model, with the switch open, will give an RF resistance simply equal to the sum of the RF resistances of the two coils, which isn't the same as the Hamwaves calculator gives for L3.

The results are kind of interesting. It doesn't take much shunt resistance in the switch to lower the Q (increase the net RF resistance). You want to be sure your switch is really OPEN when the coil isn't shorted. You can actually stand quite a bit of resistance (a good fraction of an ohm) when it's shorted without really bad effects. Here are the results I got, again at 10.0MHz:

R(switch) ohms	L(net) uH	Effective net series resistance ohms	Qu
1e9	26.598	1.138	1469
1e8	26.598	1.146	1458
1e7	26.598	1.229	1360
1e6	26.598	2.056	813
1e5	26.597	10.32	162
1e4	26.476	92.4	18.0
1e3	19.405	545	2.24
1e2	9.201	132.4	4.37
10	8.950	13.886	40.5
1.0	8.947	1.845	305
0.5	8.948	1.175	478
0.2	8.947	0.774	726
0.1	8.947	0.640	878
0.05	8.947	0.573	981
0.02	8.947	0.533	1054
0.01	8.947	0.520	1081

Cheers,
Tom

1072. Re: coils : turns shorted = quality ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-30 01:29:47 UTC
From: brian whatcott <betwys1@sbcglobal.net>
Message-ID: <IdidnQt8fvUzKV_XnZ2dnUVZ_gRi4p2d@giganews.com>
Source record: 2475

K7ITM wrote:

> So, just for fun I ran an analysis this way...
> I asked the Hamwaves on-line inductance calculator about three coils,
> all 2.5mm wire, 5mm pitch, 75mm mean coil diameter, default copper
> wire. You can put effective shunt capacitances into the model too,
> but I didn't in this case. The test frequency is 10.0MHz. These are
> the "lumped equivalent" values.
>
> L1: 13 turns 65mm long --> 9.272uH, 0.491 ohms, Qu=1187
> L2: 17 turns 85mm long --> 13.191uH, 0.646 ohms, Qu=1283
> L3 (L1 and L2 end to end): 30t, 150mm --> 26.600uH, 0.880 ohms,
> Qu=1899
> (My impression is that the RF resistance and Qu calculation yields Qu
> that's a bit too high, but that's what the calculator says...)
>
> From these, I calculate the mutual inductance. L1+L2+2*M = L3, so
> M=2.0685uH. Coupling coefficient equals M/sqrt(L1*L2), or 0.187.
>
> I put L1 and L2 and their respective RF resistances in series in
> Spice, with a resistance representing a shorting switch across L2.
> Note that this model, with the switch open, will give an RF resistance
> simply equal to the sum of the RF resistances of the two coils, which
> isn't the same as the Hamwaves calculator gives for L3.
>
> The results are kind of interesting. It doesn't take much shunt
> resistance in the switch to lower the Q (increase the net RF
> resistance). You want to be sure your switch is really OPEN when the
> coil isn't shorted. You can actually stand quite a bit of resistance
> (a good fraction of an ohm) when it's shorted without really bad
> effects. Here are the results I got, again at 10.0MHz:
>
> Effective net
> R(switch) L(net) series resistance
> ohms uH ohms Qu
> -------- -------- -------- --------
> 1e9 26.598 1.138 1469
> 1e8 26.598 1.146 1458
> 1e7 26.598 1.229 1360
> 1e6 26.598 2.056 813
> 1e5 26.597 10.32 162
> 1e4 26.476 92.4 18.0
> 1e3 19.405 545 2.24
> 1e2 9.201 132.4 4.37

> 10 8.950 13.886 40.5
> 1.0 8.947 1.845 305
> 0.5 8.948 1.175 478
> 0.2 8.947 0.774 726
> 0.1 8.947 0.640 878
> 0.05 8.947 0.573 981
> 0.02 8.947 0.533 1054
> 0.01 8.947 0.520 1081
>
> Cheers,
> Tom

Good post!

Brian W

1073. Re: coils : turns shorted = quality ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-30 05:46:12 UTC
From: Peter Dettmann <peter@aardvark.net.au>
Message-ID: <8rr5c5llkfn7hr26kktlj8i2q27nla6s74@4ax.com>
Source record: 2476
Body handling: HTML body converted to readable text

On Mon, 28 Sep 2009 19:33:12 -0400, Bill M
wrote:

>Peter Dettmann wrote:
>> On Sun, 27 Sep 2009 22:28:33 -0700 (PDT), K7ITM wrote:
>>
>>> On Sep 26, 8:25 pm, brian whatcott wrote:
>>>> rtfm wrote:
>>>>> On 2009-09-24, Tomylavitesse wrote:
>>>>>> HI,
>>>>> OK?
>>
>>
>>
>> As well, it would be interesting to see the effect of stray
>> capacitance, as the reason for shorting unused turns is to reduce the
>> problem of stray capacitance and the inductance having unwanted
>> parasitic resonances in the system, That is why shorting unused
>> sections is normally advocated.
>>
>> Peter Dettmann
>>
>>
>Well, its the better of the options but the Q of the 'desired' coil
>still takes a hit because of that nearby lump of copper.
>
>It works out ok in practice, though.
>
>-Bill

Exactly Bill, and the whole thing really is a matter of just what is
the needed, or acceptable Q. If the Q is satisfactory with the
shorted turns, then that is the way to make your design (keeping in
mind the disadvantages of open circuit unused turns).

However should you need the highest obtainable Q, then a single
isolated coil is called for which has the needed turns.

Peter

1074. Solid State 222 Amp plans?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-09-30 11:52:10 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <waydnfMYvvv2217XnZ2dnUVZ_tSdnZ2d@bright.net>
Source record: 2477

Anybody have a source of plans for a solid state 222 amplifier project? Looking to use discrete transistors (versus a 222 brick module) for a little more power out. Looking for something that will take something like 5W in and give 75-100W out. Design should use 13V power supply.

Scott
N0EDV

1075. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-01 06:00:02 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1254376801@panix.com>
Source record: 2478
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

1076. Panoramic Radio Products Spectrum Analyzer Manual and Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-05 23:39:27 UTC
From: novatech@eskimo.com
Message-ID: <hae03f02q9m@enews1.newsguy.com>
Source record: 2479
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I have a clean photo copy (from Trucker) of the Panoramic Radio Products, Inc. manual for their Models SPA-3 and SPA-3/25 along with a big cable labeled "Singer Metrics 556161-096" which I think is the interface cable between sections. The manual has schematics, parts list, operating instructions and calibration sections. The schematics have 1958 dates on them.

I have no use for these. They weigh about 4 lbs.

Email me if you can use these.

Steven Swift (alternate: gswifty@gmail.com)
--
Steven D. Swift, novatech@eskimo.com, http://www.novatech-instr.com
NOVATECH INSTRUMENTS, INC. P.O. Box 55997
206.301.8986, fax 206.363.4367 Seattle, Washington 98155 USA

1077. Information on ceramic filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-06 17:43:41 UTC
From: AF6AY <LenAnderson@ieee.org>
Message-ID: <7e1c1f8b-d3ad-446c-9af3-1e5503bbead1@a39g2000pre.googlegroups.com>
Source record: 2480

In a box of traded parts I found a cylindrical object labeled
"Clevite Ceramic Filter TL10D16A" that may be some sort
of IF filter according to very dusty old memory files. I would
appreciate it if anyone knows of this brand and can give me
an approximate center frequency and, perhaps, impedance
loading of terminations.

Hermetically sealed about 1 1/2" long by 1/4" diameter, leads
coming out ends of metal case. Unused by appearance of
end wires. Perhaps 30 to 40 years old? Trader had no idea
where he got it (probably in a trade of his).

Clevite is an old company and was purchased by Gould
Electronics some time in the late 1960s. Can't find anything
on this part in web search now.

My thanks for reading. If anyone has any info, feel free to
post it privately or publicly.

73, Len AF6AY

1078. Re: Information on ceramic filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-06 19:21:11 UTC
From: Gaius <bin@127.0.0.1>
Message-ID: <4acb98a7$0$2530$da0feed9@news.zen.co.uk>
Source record: 2481

AF6AY wrote:
> In a box of traded parts I found a cylindrical object labeled
> "Clevite Ceramic Filter TL10D16A" that may be some sort
> of IF filter according to very dusty old memory files. I would
> appreciate it if anyone knows of this brand and can give me
> an approximate center frequency and, perhaps, impedance
> loading of terminations.
>
> Hermetically sealed about 1 1/2" long by 1/4" diameter, leads
> coming out ends of metal case. Unused by appearance of
> end wires. Perhaps 30 to 40 years old? Trader had no idea
> where he got it (probably in a trade of his).
>
> Clevite is an old company and was purchased by Gould
> Electronics some time in the late 1960s. Can't find anything
> on this part in web search now.
>
> My thanks for reading. If anyone has any info, feel free to
> post it privately or publicly.
>
> 73, Len AF6AY

I've got one which looks identical, but with a different part number (TL6D11:A). Mine is a 455KHz centre frequency, 6KHz filter which was used as the AM filter in the UK/PRC-316 radio. From the circuit, I'd say it should terminate in 1K ohms.

Clevite was a UK company, based in Southampton, and part of the Brush Electrical group. They specialised in ceramic filters - and seem to have been one of the first commercial suppliers of these. I've got other equipment which uses Clevite filters, and I can assure you these are not cheap alternatives to crystal filters - they are high grade components in their own right.

I'll bet your item is on one of the standard IF frequencies - try 100KHz, 455KHz, 1.4MHz, 5MHz etc.

1079. Seeking New FAQ/Intro Maintainers for rec.radio.amateur.*

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-07 06:05:00 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/recruitment-1-1254895500@panix.com>
Source record: 2482
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/recruitment
Revision: 1.1 2007/09/29 18:42:47
Posting-Frequency: posted monthly
URL: http://www.faqs.org/faqs/radio/personal-intro/

Changes followed by "|".

The rec.radio.info newsgroup, first established in 1993, has been
recently revived by an active moderation team. We are currently seeking
suitable information, FAQ, and bulletin articles from the entire
rec.radio.* newsgroup hierarchy for simultaneous cross-posting to our
newsgroup.

We are seeking a replacement maintainer for the following information
bulletin formerly posted to rec.radio.amateur.* (and currently archived
at http://www.faqs.org/faqs/radio/personal-intro/ ):

radio/personal-intro
Subject: Guide to the rec.radio Newsgroups
Maintainer: jeffreyh@Hawaii.Edu (Jeffrey Herman)
Last Posted: 9 Nov 2001 06:18:17 GMT
Posting-Frequency: 15th of each month

We are willing to provide any technical support necessary to get this
article updated and automatically posted again at a regular interval.
This would include establishing contact with the original maintainer for
any necessary permissions. We would prefer to seek a new, dedicated
maintainer at this time, rather than start auto-posting the original
article ourselves.

For more information about our newsgroup, see:

http://www.panix.com/~rram/usenet/rri/index.html

Please direct any comments, questions, or criticisms to
rec-radio-info-request@panix.com.
```

1080. Re: coils : turns shorted = quality ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-08 15:17:31 UTC
From: stan <tsanford@nf.sympatico.ca>
Message-ID: <69dc4b6a-d62e-4921-baa1-82d7c1868a76@m11g2000vbl.googlegroups.com>
Source record: 2483
Body handling: HTML body converted to readable text

On Sep 30, 3:46 am, Peter Dettmann wrote:
> On Mon, 28 Sep 2009 19:33:12 -0400, Bill M
> wrote:
>
>
>
>
>
> >Peter Dettmann wrote:
> >> On Sun, 27 Sep 2009 22:28:33 -0700 (PDT), K7ITM wrote:
>
> >>> On Sep 26, 8:25 pm, brian whatcott wrote:
> >>>> rtfm wrote:
> >>>>> On 2009-09-24, Tomylavitesse wrote:
> >>>>>> HI,
> >>>>> OK?
>
> >>
>
> >> As well, it would be interesting to see the effect of stray
> >> capacitance, as the reason for shorting unused turns is to reduce the
> >> problem of stray capacitance and the inductance having unwanted
> >> parasitic resonances in the system, That is why shorting unused
> >> sections is normally advocated.
>
> >> Peter Dettmann
>
> >Well, its the better of the options but the Q of the 'desired' coil
> >still takes a hit because of that nearby lump of copper.
>
> >It works out ok in practice, though.
>
> >-Bill
>
> Exactly Bill, and the whole thing really is a matter of just what is
> the needed, or acceptable Q. If the Q is satisfactory with the
> shorted turns, then that is the way to make your design (keeping in
> mind the disadvantages of open circuit unused turns).
>
> However should you need the highest obtainable Q, then a single
> isolated coil is called for which has the needed turns.
>
> Peter- Hide quoted text -

>
> - Show quoted text -

All this very interesting; because many, many, (like 50+) years ago I built a signal generator, that didn't work! Nice job in an ex-Admiralty copper lined wooden box!

Came across a complete set of coils with a multi position switch which covered a wide range of frequencies. Tested it out breadboard fashion and it worked fine. Then built it into a double layer chassis constructed from two thick and therefore potentially rigid and frequency stable pieces of Aluminum!

But what I had done was dismount a set of coils from a plastic frame and mounted them in holes drilled into the two opposite panels of aluminum. Nice job mechanically but what must have hap pend is the Al. panels provided shorted turns in the same plane as the winding of the coils and reduced their Q to where the (tube, inductive feedback) circuit wouldn't work.

Never got time to work on it because I then emigrated to North America and the unfinished item is long gone. Had a nice Muirhead slow motion drive on it too!

Live and learn!

1081. Re: coils : turns shorted = quality ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-08 18:20:20 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <a0d81a6d-b530-419e-a249-dd1e39d458dc@x6g2000prc.googlegroups.com>
Source record: 2484
Body handling: HTML body converted to readable text

On Oct 8, 8:17 am, stan wrote:
> On Sep 30, 3:46 am, Peter Dettmann wrote:
>
>
>
> > On Mon, 28 Sep 2009 19:33:12 -0400, Bill M
> > wrote:
>
> > >Peter Dettmann wrote:
> > >> On Sun, 27 Sep 2009 22:28:33 -0700 (PDT), K7ITM wrote:
>
> > >>> On Sep 26, 8:25 pm, brian whatcott wrote:
> > >>>> rtfm wrote:
> > >>>>> On 2009-09-24, Tomylavitesse wrote:
> > >>>>>> HI,
> > >>>>> OK?
>
> > >>
>
> > >> As well, it would be interesting to see the effect of stray
> > >> capacitance, as the reason for shorting unused turns is to reduce the
> > >> problem of stray capacitance and the inductance having unwanted
> > >> parasitic resonances in the system, That is why shorting unused
> > >> sections is normally advocated.
>
> > >> Peter Dettmann
>
> > >Well, its the better of the options but the Q of the 'desired' coil
> > >still takes a hit because of that nearby lump of copper.
>
> > >It works out ok in practice, though.
>
> > >-Bill
>
> > Exactly Bill, and the whole thing really is a matter of just what is
> > the needed, or acceptable Q. If the Q is satisfactory with the
> > shorted turns, then that is the way to make your design (keeping in
> > mind the disadvantages of open circuit unused turns).
>
> > However should you need the highest obtainable Q, then a single
> > isolated coil is called for which has the needed turns.
>
> > Peter- Hide quoted text -

>
> > - Show quoted text -
>
> All this very interesting; because many, many, (like 50+) years ago I
> built a signal generator, that didn't work! Nice job in an ex-
> Admiralty copper lined wooden box!
>
> Came across a complete set of coils with a multi position switch which
> covered a wide range of frequencies. Tested it out breadboard fashion
> and it worked fine. Then built it into a double layer chassis
> constructed from two thick and therefore potentially rigid and
> frequency stable pieces of Aluminum!
>
> But what I had done was dismount a set of coils from a plastic frame
> and mounted them in holes drilled into the two opposite panels of
> aluminum. Nice job mechanically but what must have hap pend is the Al.
> panels provided shorted turns in the same plane as the winding of the
> coils and reduced their Q to where the (tube, inductive feedback)
> circuit wouldn't work.
>
> Never got time to work on it because I then emigrated to North America
> and the unfinished item is long gone. Had a nice Muirhead slow motion
> drive on it too!
>
> Live and learn!

In at least some editions of "Reference Data for Radio Engineers,"
there's a graph of how much the inductance of a solenoid coil is
lowered by being placed inside a shield. If the shield isn't too
close to the coil, the percentage decrease in inductance is rather low
(the coil isn't affected very much). The graph doesn't tell you how
much the Q is lowered, but I did some comparisons of Q estimates from
a couple different solenoid coil programs I have and Q estimates for
helical resonators, and came to the conclusion that you can account
for most of the lowering of Q by assuming the RF resistance remains
constant and the inductance is lowered, per the R.D.R.E. graph
(attributed to RCA). That assumes a highly-conducting shield, I'm
sure. The observation helped dispel the "magic" aura of helical
resonators: their Q is actually lower than the Qu of the coil they
contain, if that coil is in free air. (A big advantage, of course, is
that they are fully shielded.)

Cheers,
Tom

1082. Re: Antenna advice?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-09 00:04:39 UTC
From: Jack Pagel <nz9u@tds.net>
Message-ID: <r6vzm.3049$cW.475@newsreading01.news.tds.net>
Source record: 2485

Ron wrote:
> Hi
>
> I have a 50 ft tower just ready to throw up something to operate.
>
> Cost is the problem but I have a lot of parts to build. I want to put up a
> dipole (I have a manual all band tuner) and my question is should feed it
> with ladder line or feed it with coax and then run each leg about 68 ft .
>
> Second idea is I have an old aluminum omni antenna that used to have 3
> traps
> within it, however at that height it will come down quickly as this antenna
> is meant to be on the ground (no ground planes) so I want to make this omni
> as long as practically possible and tune it to utilize it as best possible.
>
> Any suggestions? This is really all I have to work with. Only want to climb
> this thing a couple times and hope its good for the winter.
>
> Thanks
> 73s
>
> Ron
>
Seeing you have a tuner, I would go with an 80 meter dipole fed with the
ladder-line. One antenna for all the bands 80 thru 10. FWIW

1083. Re: coils : turns shorted = quality ?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-09 03:15:24 UTC
From: Bill M <radioexray@geeemail.com>
Message-ID: <ham9sd02d31@news3.newsguy.com>
Source record: 2486

K7ITM wrote:

> In at least some editions of "Reference Data for Radio Engineers,"
> there's a graph of how much the inductance of a solenoid coil is
> lowered by being placed inside a shield. If the shield isn't too
> close to the coil, the percentage decrease in inductance is rather low
> (the coil isn't affected very much). The graph doesn't tell you how
> much the Q is lowered, but I did some comparisons of Q estimates from
> a couple different solenoid coil programs I have and Q estimates for
> helical resonators, and came to the conclusion that you can account
> for most of the lowering of Q by assuming the RF resistance remains
> constant and the inductance is lowered, per the R.D.R.E. graph
> (attributed to RCA). That assumes a highly-conducting shield, I'm
> sure. The observation helped dispel the "magic" aura of helical
> resonators: their Q is actually lower than the Qu of the coil they
> contain, if that coil is in free air. (A big advantage, of course, is
> that they are fully shielded.)

This gets to be a jello-y area if you follow the clues far enough. The coil's Q, or better said, the circuit's Q has a lot to do with how much spacing is required. Old timey Rule Of Thumb suggests one diameter spacing away from enclosures but thats typically relative to lower Q coils which are common rote. I make that comparison against high-Q coils in dx crystal sets where 12-18 inch separation isn't uncommon.

The textbook Q formula doesn't address this...nor is it a necessarily a biggie because most of the coils that we encounter in the situation presented in the original post aren't of high enough Q so as to present any problem.

But, it needs to be reminded that coil Q is definitely subject to its surroundings. Re-tweaking the inductance value is easy enough but you cannot recoup the loss of Q. It always depends on the specific application.

-Bill

1084. Re: Antenna advice?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-09 03:25:07 UTC
From: Bill M <radioexray@geeemail.com>
Message-ID: <hamael02dfa@news3.newsguy.com>
Source record: 2487

Jack Pagel wrote:

>>
> Seeing you have a tuner, I would go with an 80 meter dipole fed with the
> ladder-line. One antenna for all the bands 80 thru 10. FWIW

Tossing out another option....

I once used a "quarter-wave sloper" off of a grounded 50 foot tower.
Tower was used as a "ground plane". It did a very convincing job for DX
on 40 m and was somewhat directional.

Having multiple antennas is always a bonus. Add one of these to your
antenna switch!

-Bill WX4A

1085. Re: Antenna advice?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-09 22:08:07 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <srednfeTJq_aKVLXnZ2dnUVZ_oRi4p2d@bright.net>
Source record: 2488

Bill M wrote:
> Jack Pagel wrote:
>
>>>
>> Seeing you have a tuner, I would go with an 80 meter dipole fed with
>> the ladder-line. One antenna for all the bands 80 thru 10. FWIW
>
> Tossing out another option....
>
> I once used a "quarter-wave sloper" off of a grounded 50 foot tower.
> Tower was used as a "ground plane". It did a very convincing job for DX
> on 40 m and was somewhat directional.
>
> Having multiple antennas is always a bonus. Add one of these to your
> antenna switch!
>
> -Bill WX4A

Or...skip the HF antennas and put up a converted 18" DirecTV dish and get on 10 GHz. At ground level and 2W, I made a 180.5 mile QSO during the 10 GHz and Up contest last month. Didn't even break a sweat ;)

Scott
N0EDV

1086. FS : GR slotted line and accesories

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-11 03:48:06 UTC
From: Henry <wa0goz@arrl.net>
Message-ID: <harkhj$58g$2@news.eternal-september.org>
Source record: 2489

I have the following General Radio equipment for sale. All of it is in very good condition and working:

The following items I would like to sell as a set:

1 874-LB 55 cm Slotted Line
1 874-LV Micrometer for the slotted line
2 874-LTL Trombone lines
1 874-GA Adjustable Attenuator
1 874-L30 30 cm Air Line
3 874-L20 20 cm Air Lines
4 874-L10 10 cm Air Lines
1 874-F1000 1000 MHz Low Pass Filter
1 874-L500 500 MHz Low Pass Filter
1 874-D50 50 cm Adjustable Stub
1 874-D50L 50 cm Adjustable Stub
1 874-D20 20 cm Adjustable Stub
2 874-LA Adjustable Line
5 874-T Tee's
1 874-EL Elbow
2 874-K Coupling Capacitors
5 Small diameter cables with GR conn.'s on both ends
2 Small diameter cables with GR conn. on one end and BNC on other
1 Small diameter cable with GR conn. on one end and banana plugs on other
5 Large diameter cables with GR conn. on both ends

I will accept any reasonable offer plus postage. I can send pictures if requested

I can be reached at either wa0goz@arrl.net or 651-426-4144. Ask for Henry.

1087. The dish problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-13 04:45:39 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <4ec1b3b7-b4e6-4e4d-89aa-d019de5b2447@q40g2000prh.googlegroups.com>
Source record: 2490

Hi All,

Modern engineering text indicates that for the same frequency, a large fully illuminated dish will provide more gain than it’s smaller equivalent. Why is this ?

Consider the following scenario:

======

Take a 10GHz RF source, and attach an appropriate feed horn to fully illuminate a 2m dia dish.

Adjust focus so that the wave front out of the dish is parallel (2m diameter ?)

At a distance, arrange the same setup, except the RF source is replaced by a detector.

Make a note of received signal strength.

======

Repeat the same experiment at the same frequency, but with a 3mdiameter dish at each end, and appropriate feed horns .

Make a note of received signal strength.

======

Also, see http://www.idesignz.org/misc/dishproblem.pdf

In both cases all of the TX energy is transmitted in a parallel beam, whose diameter is the same as the respective dish.

It would seem that if you can fully convert all of the TX RF into parallel waves, at some point the diameter of the dishes should not make any difference to the transfer efficiency of the system.

So, why would the received signal for the 3m + 3m dish be greater than that of the 2m + 2m dish experiment ?

Thoughts please.

Mark

http://www.idesignz.org/AMPS/AMPS_BS.html – Experimental AMPS micro Base Station project

http://www.idesignz.org/UAV/index.html – Early work on the four rotor FlyingThingy

1088. Re: The dish problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-13 05:31:25 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <ve28d5lgk1hgnul2e6et5e6etjqv8fqh5q@4ax.com>
Source record: 2491

On Mon, 12 Oct 2009 21:45:39 -0700 (PDT), MarkAren
<markaren10@yahoo.com> wrote:

>Hi All,
>
>Modern engineering text indicates that for the same frequency, a large
>fully illuminated dish will provide more gain than itï¿½s smaller
>equivalent. Why is this ?
>
>Consider the following scenario:
>
>======
>
>Take a 10GHz RF source, and attach an appropriate feed horn to fully
>illuminate a 2m dia dish.
>
>Adjust focus so that the wave front out of the dish is parallel (2m
>diameter ?)
>
>At a distance, arrange the same setup, except the RF source is
>replaced by a detector.
>
>Make a note of received signal strength.
>
>======
>
>Repeat the same experiment at the same frequency, but with a
>3mdiameter dish at each end, and appropriate feed horns .
>
>Make a note of received signal strength.
>
>======
>
>Also, see http://www.idesignz.org/misc/dishproblem.pdf
>
>In both cases all of the TX energy is transmitted in a parallel beam,
>whose diameter is the same as the respective dish.

A parallel beam is not formed, rather a slightly expanding beam due to
diffraction.

Diffraction also limits the resolving power of an astronomical
telescope, so when looking at some binary stars, a small telescope
will show only a single blob, a slightly larger telescope will show an
elongated figure (e.g. figure of 8) and an even larger telescope will

show two separate stars.

The diffraction limit is defined as 1.22*wavelength/diemeter radians or about 70*wavelength/diameter degrees.

Diffraction also controls the beam spreading from a parabolic disk or laser. For this reason, a laser (with an aperture less than 1 cm) can not be used to illuminate the reflectors on the moon, but typically the laser beam is transmitted through a telescope with typically 1 m diameter. The beam is 100-1000 times narrower than the beam from the laser alone. The area illuminated on the moon is 10,000-1,000,000 times smaller and hence reflected power that much stronger than with a bare laser.

Paul OH3LWR

1089. Re: The dish problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-14 06:08:14 UTC
From: raypsi <rborowiak@gmail.com>
Message-ID: <843b039b-902a-40ea-a722-097211147dc7@s31g2000yqs.googlegroups.com>
Source record: 2492

Hey OM:

Yes how is it? Bigger is better.
I mean you are using the same source for both antennas but how does
the larger one have all that extra power, being emitted and where does
all that extra power come from?

So instead of using that 400 watt microwave oven I just get me a 30
foot dish and a 20 milliwatt emitter and save all that money I would
have wasted using the microwave oven, cooking my turkey.

73 OM
de n8zu

On Oct 13, 12:45 am, MarkAren <markare...@yahoo.com> wrote:

> Hi All,
>
> Modern engineering text indicates that for the same frequency, a large
> fully illuminated dish will provide more gain than it’s smaller
> equivalent. Why is this ?
>
> Consider the following scenario:
>
> ======
>
> Take a 10GHz RF source, and attach an appropriate feed horn to fully
> illuminate a 2m dia dish.
>
> Adjust focus so that the wave front out of the dish is parallel (2m
> diameter ?)
>
> At a distance, arrange the same setup, except the RF source is
> replaced by a detector.
>
> Make a note of received signal strength.
>
> ======
>
> Repeat the same experiment at the same frequency, but with a
> 3mdiameter dish at each end, and appropriate feed horns .
>
> Make a note of received signal strength.
>
> ======
>

> Also, seehttp://www.idesignz.org/misc/dishproblem.pdf
>
> In both cases all of the TX energy is transmitted in a parallel beam,
> whose diameter is the same as the respective dish.
>
> It would seem that if you can fully convert all of the TX RF into
> parallel waves, at some point the diameter of the dishes should not
> make any difference to the transfer efficiency of the system.
>
> So, why would the received signal for the 3m + 3m dish be greater than
> that of the 2m + 2m dish experiment ?
>
> Thoughts please.
>
> Mark
>
> http://www.idesignz.org/AMPS/AMPS_BS.html– Experimental AMPS micro
> Base Station project
>
> http://www.idesignz.org/UAV/index.html– Early work on the four rotor
> FlyingThingy

1090. Re: The dish problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-14 09:44:43 UTC
From: Highland Ham <rfburns@allbands.net>
Message-ID: <IvSdnfmWS7eKPkjXnZ2dnUVZ8mudnZ2d@pipex.net>
Source record: 2493

raypsi wrote:
> So instead of using that 400 watt microwave oven I just get me a 30
> foot dish and a 20 milliwatt emitter and save all that money I would
> have wasted using the microwave oven, cooking my turkey.
>
> 73 OM
> de n8zu
==========
I am sure your neighbours would love that dish (NOT).

Frank GM0CSZ / KN6WH

1091. Re: The dish problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-14 11:39:14 UTC
From: brian whatcott <betwys1@sbcglobal.net>
Message-ID: <xfSdna1drY0WJUjXnZ2dnUVZ_jZi4p2d@giganews.com>
Source record: 2494

Paul Keinanen wrote:
> On Mon, 12 Oct 2009 21:45:39 -0700 (PDT), MarkAren
> <markaren10@yahoo.com> wrote:
>
>> Hi All,
>>
>> Modern engineering text indicates that for the same frequency, a large
>> fully illuminated dish will provide more gain than itï¿½s smaller
>> equivalent. Why is this ?
...
>>
>> In both cases all of the TX energy is transmitted in a parallel beam,
>> whose diameter is the same as the respective dish.
****

> A parallel beam is not formed, rather a slightly expanding beam due to
> diffraction.
>
> Diffraction also limits the resolving power of an astronomical
> telescope, so when looking at some binary stars, a small telescope
> will show only a single blob, a slightly larger telescope will show an
> elongated figure (e.g. figure of 8) and an even larger telescope will
> show two separate stars.
>
> The diffraction limit is defined as 1.22*wavelength/diemeter radians
> or about 70*wavelength/diameter degrees.
>
> Diffraction also controls the beam spreading from a parabolic disk or
> laser. For this reason, a laser (with an aperture less than 1 cm) can
> not be used to illuminate the reflectors on the moon, but typically
> the laser beam is transmitted through a telescope with typically 1 m
> diameter. The beam is 100-1000 times narrower than the beam from the
> laser alone. The area illuminated on the moon is 10,000-1,000,000
> times smaller and hence reflected power that much stronger than with a
> bare laser.
>
> Paul OH3LWR
>
Great response!

Brian W

1092. Re: The dish problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-14 11:48:40 UTC
From: Bill M <radioexray@geeemail.com>
Message-ID: <hb4drc01gue@news5.newsguy.com>
Source record: 2495

raypsi wrote:
> Hey OM:
>
> Yes how is it? Bigger is better.
> I mean you are using the same source for both antennas but how does
> the larger one have all that extra power, being emitted and where does
> all that extra power come from?
>
> So instead of using that 400 watt microwave oven I just get me a 30
> foot dish and a 20 milliwatt emitter and save all that money I would
> have wasted using the microwave oven, cooking my turkey.
>
> 73 OM
> de n8zu

It comes from "focusing" the existing energy. No new energy is created.

Yes, you *could* do that with a turkey. Just like you *could* cook it
with a magnifying glass out in the sun. :)

-Bill

1093. Re: The dish problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-15 17:02:39 UTC
From: raypsi <rborowiak@gmail.com>
Message-ID: <43d784ae-1bd3-475b-a05d-e99264e8395b@m38g2000yqd.googlegroups.com>
Source record: 2496

Hey OM:

Take a 60db gain dish illuminate that with 20 milliwatts of power.
Your ERP is now 20,000 watts.

My question raises the bar, how can you focus 20 milliwatts of EM
particles and waves, to end up with 20,000 watts of EM particles and
waves? And I can bet that it's all those extra particles that are
going to be cooking my turkey.

There's only one way that can happen: the dish is a storage device:
the size and frequency of which determine the storage capacity in this
case the storage capacity gives me a 60db gain. And will always give
you 60db more than you put in.

73 OM

de n8zu
>
> It comes from "focusing" the existing energy. No new energy is created.
>
> Yes, you *could* do that with a turkey. Just like you *could* cook it
> with a magnifying glass out in the sun. :)
>
> -Bill

1094. Re: The dish problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-15 18:08:49 UTC
From: terry <tsanford@nf.sympatico.ca>
Message-ID: <5e1a3d2d-e6ef-4588-8c35-9a7579061aef@q14g2000vbi.googlegroups.com>
Source record: 2497

On Oct 15, 3:02 pm, raypsi <rborow...@gmail.com> wrote:
> Hey OM:
>
> Take a 60db gain dish illuminate that with 20 milliwatts of power.
> Your ERP is now 20,000 watts.
>
> My question raises the bar, how can you focus 20 milliwatts of EM
> particles and waves, to end up with 20,000 watts of EM particles and
> waves? And I can bet that it's all those extra particles that are
> going to be cooking my turkey.
>
> There's only one way that can happen: the dish is a storage device:
> the size and frequency of which determine the storage capacity in this
> case the storage capacity gives me a 60db gain. And will always give
> you 60db more than you put in.
>
> 73 OM
>
> de n8zu
>

60db in one specific direction more than if same amount of RF was
dissipated equally in all directions. Correct?
Would not matter if starting with one milliwatt, one watt, one
megawatt.
The beaming effect will concentrate the available energy from all
directions in a specific one.

1095. Re: The dish problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-16 00:32:09 UTC
From: Lawrence Statton <yankeeinexile@gmail.com>
Message-ID: <m163ag2n7a.fsf@mac.lan>
Source record: 2498

raypsi <rborowiak@gmail.com> writes:

> Hey OM:
>
> Take a 60db gain dish illuminate that with 20 milliwatts of power.
> Your ERP is now 20,000 watts.

EIRP, actually ... Radiated power, relative to a (abstract) isotropic radiator.

> My question raises the bar, how can you focus 20 milliwatts of EM
> particles and waves, to end up with 20,000 watts of EM particles and
> waves?

You can't. You're just focusing that 20 mW of power in the "useful direction"

Imagine an incandescent light bulb hanging from a wire -- this is a reasonable metaphor for an isotropic radiator - it puts out (nearly) the same amount of light in all directions ... If the light isn't bright enough to read a book, you might put a reflector behind it - there is no more light being generated, but the page just got brighter, because some of the energy that was illuminating the garage roof, your head, the walls and the junk on the shelves is now illuminating the page.

> And I can bet that it's all those extra particles that are
> going to be cooking my turkey.

There are no particles, and there are no "extra" particles.

> de n8zu
>>
>> It comes from "focusing" the existing energy. No new energy is created.
>>
>> Yes, you *could* do that with a turkey. Just like you *could* cook it
>> with a magnifying glass out in the sun. :)

Indeed - first you heat one molecule of water, then refocus the beam, heat the next, repeat 6 x 10**23 times for each mole of turkey.

>>
>> -Bill

1096. Re: The dish problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-16 13:57:05 UTC
From: raypsi <rborowiak@gmail.com>
Message-ID: <8720ff4b-1462-4479-8eef-98409ab1884d@m11g2000yqf.googlegroups.com>
Source record: 2499

Hey OM

What you are saying is that I can take a 20 mW emitter and with an infinite size dish I can get infinite power from a 20 mW emitter?

No way you can get infinite power from a 20 mW source unless the dish is supplying the extra power. In other words it's not possible to get infinite power focused from a 20 mW source, and that all that power is coming from the 20 mW emitter.

Take that 20 mW emitters' isotropic pattern, there is a potential of an infinite amount of power in that pattern because it can be focused?

Frying that turkey only takes 20 mW of total power period. And it may or may not be from focusing the 20 mW. The turkey gets cooked with 20 mW is still a fact that can't be refutted.

73 OM
de n8zu

> You can't. You're just focusing that 20 mW of power in the "useful
> direction"
>
>>
>
>
> >> -Bill- Hide quoted text -
>
> - Show quoted text -

1097. Re: The dish problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-16 14:57:03 UTC
From: gwatts <gwatts@frontnet.net>
Message-ID: <4R%Bm.262974$cf6.261694@newsfe16.iad>
Source record: 2500

raypsi wrote:
> Hey OM
>
> What you are saying is that I can take a 20 mW emitter and with an
> infinite size dish I can get infinite power from a 20 mW emitter?

You can get infinite *Effective Isotropic Radiated Power* from 20 mW with an infinite dish. Not practical, but theoretically correct.

You're misunderstanding EIRP, Effective Isotropic Radiated Power. If you feed a 60 dB parabolic antenna with 20 mW you get the equivalent of feeding a theoretical *isotropic* radiator with 20 kW, the key word being 'isotropic,' meaning that 20 kW is being radiated in all directions. Your 60 dB dish directs your 20 mW *in a specific direction* with a *specific* beam width. *In that beam* the field strength is the same as it would be from 20 kW *going in every direction*. The ratio of every direction to your dish's beam width is 60 dB.

> No way you can get infinite power from a 20 mW source unless the dish
> is supplying the extra power. In other words it's not possible to get
> infinite power focused from a 20 mW source, and that all that power is
> coming from the 20 mW emitter.

You're not getting infinite power, you're getting 20 mW focused into a finite beam width and in that beam width it has the same field strength that 20 kW going in all directions would give you.

> Take that 20 mW emitters' isotropic pattern, there is a potential of
> an infinite amount of power in that pattern because it can be
> focused?

Only if it can be focused into an infinitely small point which you won't get from any finite gain antenna.

> Frying that turkey only takes 20 mW of total power period. And it may
> or may not be from focusing the 20 mW. The turkey gets cooked with 20
> mW is still a fact that can't be refutted.

Part of that fact is it will take a long, long time to cook it with only 20 mW because you can only cook (defined as raising the temperature to about 160 F) a very, very small portion of the turkey at a time with only 20 mW.

- W8LNA

>
> 73 OM
> de n8zu
>
>
>
>
>> You can't. You're just focusing that 20 mW of power in the "useful
>> direction"
>>
>>
>>>> -Bill- Hide quoted text -
>> - Show quoted text -
>

1098. Re: The dish problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-16 19:08:06 UTC
From: brian whatcott <betwys1@sbcglobal.net>
Message-ID: <iZednXNwx9t-WUXXnZ2dnUVZ_rWdnZ2d@giganews.com>
Source record: 2301

Hi Mark,
I looked over the thread that your note kicked off.
Unusually, this was not very informative.
People were sticking with antenna measures, which weren't helping much
in this case.

I'll give it a try, introducing the missing concept: energy (and
power) DENSITY.

If you sit in the bright sun for 2 hours, you are likely to get a sunburn.

If you sit in a dark tent, with an opening for a magnifying glass of 2
inch diameter (= 5 cm), you will get a small burn within 2 minutes.

Looking now at the numbers, you know that the effective power density
of the Sun at the surface is 700 watts per square meter. Your skin
represents say 1.5 sq meters, so you are getting a total power of say 1
kilowatt.
So we are suggesting, at a particular place it takes 1 kilowatt of solar
power for 2 hours to burn you all over.

Now lets look at that dark tent with a hole for a magnifying glass:
the power density at the glass is pi times 1 times 1 inches or pi X .025
X 0.025 square meters = 0.002 sq meters.
The Solar power at the glass is 700w X 0.002 m^2 = 1.4 watts

How the hell can 1.4 watts burn us in 2 minutes, but 1000 watts cannot
burn us in less than 2 hours?

Answer power density:
That 1.4 watts is focussed on a spot that is 1 mm diameter
(40 / 1000 inch diameter) so its power density is
1.4 / pi X 0.001 X 0.001 watts per sq meter

...and THAT is 446 kilowatts /sq meter.

Oh look: the power density of the spot in the dark tent is about SIXTY
times as great as plain sunlight, so waddaya know, it burns us 60 times
as fast (but only over a LITTLE spot.)

And that's what this thread was all about - the effects of focussing
energy over a particular area.

I hope this helps.

Brian W

MarkAren wrote:
> Hi All,
>
> Modern engineering text indicates that for the same frequency, a large
> fully illuminated dish will provide more gain than itï¿½s smaller
> equivalent. Why is this ?
>
> Consider the following scenario:
>
> ======
>
> Take a 10GHz RF source, and attach an appropriate feed horn to fully
> illuminate a 2m dia dish.
>
> Adjust focus so that the wave front out of the dish is parallel (2m
> diameter ?)
>
> At a distance, arrange the same setup, except the RF source is
> replaced by a detector.
>
> Make a note of received signal strength.
>
> ======
>
> Repeat the same experiment at the same frequency, but with a
> 3mdiameter dish at each end, and appropriate feed horns .
>
> Make a note of received signal strength.
>
> ======
>
> Also, see http://www.idesignz.org/misc/dishproblem.pdf
>
> In both cases all of the TX energy is transmitted in a parallel beam,
> whose diameter is the same as the respective dish.
>
> It would seem that if you can fully convert all of the TX RF into
> parallel waves, at some point the diameter of the dishes should not
> make any difference to the transfer efficiency of the system.
>
> So, why would the received signal for the 3m + 3m dish be greater than
> that of the 2m + 2m dish experiment ?
>
> Thoughts please.
>
> Mark
>
> http://www.idesignz.org/AMPS/AMPS_BS.html ï¿½ Experimental AMPS micro
> Base Station project
>
> http://www.idesignz.org/UAV/index.html ï¿½ Early work on the four rotor

> FlyingThingy

1099. Re: The dish problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-17 15:58:46 UTC
From: terry <tsanford@nf.sympatico.ca>
Message-ID: <fd962fd1-b840-4a57-b8c1-32adcf4e9a66@o10g2000yqa.googlegroups.com>
Source record: 2302

On Oct 16, 5:08 pm, brian whatcott <betw...@sbcglobal.net> wrote:
> Hi Mark,
> I looked over the thread that your note kicked off.
> Unusually, this was not very informative.
> People were sticking with antenna measures, which weren't helping much
> in this case.
>
> I'll give it a try, introducing the missing concept: energy (and
> power) DENSITY.
>
> If you sit in the bright sun for 2 hours, you are likely to get a sunburn.
>
> If you sit in a dark tent, with an opening for a magnifying glass of 2
> inch diameter (= 5 cm), you will get a small burn within 2 minutes.
>
> Looking now at the numbers, you know that the effective power density
> of the Sun at the surface is 700 watts per square meter. Your skin
> represents say 1.5 sq meters, so you are getting a total power of say 1
> kilowatt.
> So we are suggesting, at a particular place it takes 1 kilowatt of solar
> power for 2 hours to burn you all over.
>
> Now lets look at that dark tent with a hole for a magnifying glass:
> the power density at the glass is pi times 1 times 1 inches or pi X .025
> X 0.025 square meters = 0.002 sq meters.
> The Solar power at the glass is 700w X 0.002 m^2 = 1.4 watts
>
> How the hell can 1.4 watts burn us in 2 minutes, but 1000 watts cannot
> burn us in less than 2 hours?
>
> Answer power density:
> That 1.4 watts is focused on a spot that is 1 mm diameter
> (40 / 1000 inch diameter) so its power density is
> 1.4 / pi X 0.001 X 0.001 watts per sq meter
>
> ...and THAT is 446 kilowatts /sq meter.
>
> Oh look: the power density of the spot in the dark tent is about SIXTY
> times as great as plain sunlight, so whaddaya know, it burns us 60 times
> as fast (but only over a LITTLE spot.)
>
> And that's what this thread was all about - the effects of focusing
> energy over a particular area.
>

> I hope this helps.
>
> Brian W
>
>
>
> MarkAren wrote:
> > Hi All,
>
> > Modern engineering text indicates that for the same frequency, a large
> > fully illuminated dish will provide more gain than it’s smaller
> > equivalent. Why is this ?
>
> > Consider the following scenario:
>
> > ======
>
> > Take a 10GHz RF source, and attach an appropriate feed horn to fully
> > illuminate a 2m dia dish.
>
> > Adjust focus so that the wave front out of the dish is parallel (2m
> > diameter ?)
>
> > At a distance, arrange the same setup, except the RF source is
> > replaced by a detector.
>
> > Make a note of received signal strength.
>
> > ======
>
> > Repeat the same experiment at the same frequency, but with a
> > 3m diameter dish at each end, and appropriate feed horns .
>
> > Make a note of received signal strength.
>
> > ======
>
> > Also, seehttp://www.idesignz.org/misc/dishproblem.pdf
>
> > In both cases all of the TX energy is transmitted in a parallel beam,
> > whose diameter is the same as the respective dish.
>
> > It would seem that if you can fully convert all of the TX RF into
> > parallel waves, at some point the diameter of the dishes should not
> > make any difference to the transfer efficiency of the system.
>
> > So, why would the received signal for the 3m + 3m dish be greater than
> > that of the 2m + 2m dish experiment ?
>
> > Thoughts please.

>
> > Mark
>
> >http://www.idesignz.org/AMPS/AMPS_BS.html- Experimental AMPS micro
> > Base Station project
>
> >http://www.idesignz.org/UAV/index.html- Early work on the four rotor
> > FlyingThingy- Hide quoted text -
>
> - Show quoted text -

A good read thank you.
A bit lengthy; but well done.
While illuminating the subject it does focus attention on the
important point; the 'beaming' or directionalizing of the available
energy, whether it be sunlight or any other frequency.
However there will always be some who 'can't' or 'won't' understand.
Witness some of the nonsense that is posted on various news groups all
the time.
PS. That 700 watts per sq. metre is an interesting number? Bright sun
at midday at the equator perhaps?
But I doubt that here at around 48 degrees north and with our climate
we get anything close to that?
Also now wondering how efficient a solar panel is at converting that
700 watts into electric power (for say home use). Which may be why
some 'solar' collectors are both photo-voltaic and heat collecting.

1100. Re: Information on ceramic filter

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-17 16:37:18 UTC
From: AF6AY <LenAnderson@ieee.org>
Message-ID: <db35c72f-46cc-4065-b72d-d29988bc5fbb@i12g2000prg.googlegroups.com>
Source record: 2303
Body handling: HTML body converted to readable text

On Oct 6, 12:21 pm, Gaius wrote:
> AF6AY wrote:
> > In a box of traded parts I found a cylindrical object labeled
> > "Clevite Ceramic Filter TL10D16A" that may be some sort
> > of IF filter according to very dusty old memory files. I would
> > appreciate it if anyone knows of this brand and can give me
> > an approximate center frequency and, perhaps, impedance
> > loading of terminations.
>
> > Hermetically sealed about 1 1/2" long by 1/4" diameter, leads
> > coming out ends of metal case. Unused by appearance of
> > end wires. Perhaps 30 to 40 years old? Trader had no idea
> > where he got it (probably in a trade of his).
>
> > Clevite is an old company and was purchased by Gould
> > Electronics some time in the late 1960s. Can't find anything
> > on this part in web search now.
>
> > My thanks for reading. If anyone has any info, feel free to
> > post it privately or publicly.
>
> > 73, Len AF6AY
>
> I've got one which looks identical, but with a different part number
> (TL6D11:A). Mine is a 455KHz centre frequency, 6KHz filter which was
> used as the AM filter in the UK/PRC-316 radio. From the circuit, I'd say
> it should terminate in 1K ohms.
>
> Clevite was a UK company, based in Southampton, and part of the Brush
> Electrical group. They specialised in ceramic filters - and seem to have
> been one of the first commercial suppliers of these. I've got other
> equipment which uses Clevite filters, and I can assure you these are not
> cheap alternatives to crystal filters - they are high grade components
> in their own right.
>
> I'll bet your item is on one of the standard IF frequencies - try
> 100KHz, 455KHz, 1.4MHz, 5MHz etc.- Hide quoted text -

Thanks to a kind person who supplied me with Clevite catalog data
plus some other Clevite literature, I correctly identified my
Clevite TL-10D16A filter. It has a 455 KHz center-frequency,
-6 db bandwidth of 10 KHz, -60 db BW of 16 KHz. 1500 Ohms input
and output impedance. Insertion loss about 7 db. Data from

Clevite Bulletin 94012 dated Octover 1961. Bench testing shows a fairly flat passband and very steep skirt attenuation. In a couple of weeks I might have access to better instrumentation to quantify its response characteristics.

Clevite was located at 232 Forbes Road, Bedford, Ohio, known in Clevite Electronic Components, a division of Clevite Corporation, Cleveland, Ohio. By 1969 they were at the same address and known as "Gould Piezoelectric Division" with a zip code of 44146. Piezoelectic devices had been in production since 1959. Whether it was later acquired by a UK firm is unknown on what I have.

One of the interesting bits of information was a data sheet on Clevite "Identical Resonators" which contains 10 tables of ladder filter arrangements from 2 to 8 resonators as bandpass filters using only capacitors as coupling elements. That might be applicable to quartz crystal resonators.

73, Len AF6AY

1101. Site for DIY 2.4Ghz impedance equipment help

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-18 18:41:23 UTC
From: amdx <amdx@knology.net>
Message-ID: <491f3$4adb614e$18ec6dd7$30459@KNOLOGY.NET>
Source record: 2304
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Hi all,
I saw a site where a fellow designed a unit to measure impedance at 2.4 ghz, for use on wifi antennas. I don't recall if it was return loss or impedance.
It gave detailed instructions on how to build and he also had ready built units
for sale.
I think it was a ham that designed the unit. I also think he was not in the states, possibly a P or PY call sign, but the memory is not good!
Any help would be appreciated.
Thanks, Mike

1102. Re: Site for DIY 2.4Ghz impedance equipment help

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-18 20:21:13 UTC
From: Brian Howie <brian@nospam.demon.co.uk>
Message-ID: <KeX$LfD5i32KFwSR@b-howie.demon.co.uk>
Source record: 2305
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

In message <491f3$4adb614e$18ec6dd7$30459@KNOLOGY.NET>, amdx
<amdx@knology.net> writes
>Hi all,
> I saw a site where a fellow designed a unit to measure impedance at 2.4
>ghz, for use on wifi antennas. I don't recall if it was return loss or
>impedance.
>It gave detailed instructions on how to build and he also had ready built
>units
>for sale.
>I think it was a ham that designed the unit. I also think he was not in the
>states, possibly a P or PY call sign, but the memory is not good!
> Any help would be appreciated.
> Thanks, Mike
>
This it ?

http://www.frars.org.uk/cgi-bin/render.pl?pageid=1085

73 Brian GM4DIJ
--
Brian Howie

1103. Re: Site for DIY 2.4Ghz impedance equipment help

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-18 20:34:24 UTC
From: christofire <christofire@btinternet.com>
Message-ID: <8u2dnfZiA89G5kbXnZ2dnUVZ8oCdnZ2d@bt.com>
Source record: 2306
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Brian Howie" <brian@nospam.demon.co.uk> wrote in message
news:KeX$LfD5i32KFwSR@b-howie.demon.co.uk...
> In message <491f3$4adb614e$18ec6dd7$30459@KNOLOGY.NET>, amdx
> <amdx@knology.net> writes
>>Hi all,
>> I saw a site where a fellow designed a unit to measure impedance at 2.4
>>ghz, for use on wifi antennas. I don't recall if it was return loss or
>>impedance.
>>It gave detailed instructions on how to build and he also had ready built
>>units
>>for sale.
>>I think it was a ham that designed the unit. I also think he was not in
>>the
>>states, possibly a P or PY call sign, but the memory is not good!
>> Any help would be appreciated.
>> Thanks, Mike
>>
> This it ?
>
> http://www.frars.org.uk/cgi-bin/render.pl?pageid=1085
>
> 73 Brian GM4DIJ
> --
> Brian Howie

A piece of Sage Wireline and a PCB to terminate it would be easier.

Chris

1104. Re: Site for DIY 2.4Ghz impedance equipment help

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-19 00:14:52 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <upbnd5tethul84llpcsdql49oi84fdanrh@4ax.com>
Source record: 2307
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sun, 18 Oct 2009 13:41:23 -0500, "amdx" <amdx@knology.net> wrote:

>Hi all,
> I saw a site where a fellow designed a unit to measure impedance at 2.4
>ghz, for use on wifi antennas. I don't recall if it was return loss or
>impedance.
>It gave detailed instructions on how to build and he also had ready built
>units
>for sale.
>I think it was a ham that designed the unit. I also think he was not in the
>states, possibly a P or PY call sign, but the memory is not good!
> Any help would be appreciated.
> Thanks, Mike

This is a copy of my reply to your duplicate posting to
alt.internet.wireless. Please don't do that again:

This one?
<http://pe2er.nl/wifiswr/index.htm>
or one of these:
<http://www.qsl.net/n9zia/wireless/appendixF.html>

What I do is use a return loss bridge as in:
<http://www.qsl.net/n9zia/wireless/pics/rtrn_loss_bridge.png>
I've built several out of chip resistors and junk parts. I have one
that works well up to about 8GHz. Great for testing antennas. That's
what's inside a Telonic Rho-tector (which can usually be found on eBay
for cheap). A few models go up to 2.4Ghz.

You'll also *might* need a microwave load or three. 50 ohms for a
reference, but also some other known values for calibration.

The problem is that you'll need an RF sweep generator to use this
effectively. It's also not a VNA (vector network analyzer) so it
won't tell you if any reactance is capacitive or inductive.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

1105. Re: Site for DIY 2.4Ghz impedance equipment help

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-19 00:34:54 UTC
From: amdx <amdx@knology.net>
Message-ID: <421e$4adbb429$18ec6dd7$28138@KNOLOGY.NET>
Source record: 2308
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
news:upbnd5tethul84llpcsdql49oi84fdanrh@4ax.com...
> On Sun, 18 Oct 2009 13:41:23 -0500, "amdx" <amdx@knology.net> wrote:
>
>>Hi all,
>> I saw a site where a fellow designed a unit to measure impedance at 2.4
>>ghz, for use on wifi antennas. I don't recall if it was return loss or
>>impedance.
>>It gave detailed instructions on how to build and he also had ready built
>>units
>>for sale.
>>I think it was a ham that designed the unit. I also think he was not in
>>the
>>states, possibly a P or PY call sign, but the memory is not good!
>> Any help would be appreciated.
>> Thanks, Mike
>
>
> This is a copy of my reply to your duplicate posting to
> alt.internet.wireless. Please don't do that again:
>

Sorry, I thought about putting it on these other groups just as I hit send.

> This one?
> <http://pe2er.nl/wifiswr/index.htm>
> or one of these:
> <http://www.qsl.net/n9zia/wireless/appendixF.html>
>
> What I do is use a return loss bridge as in:
> <http://www.qsl.net/n9zia/wireless/pics/rtrn_loss_bridge.png>
> I've built several out of chip resistors and junk parts. I have one
> that works well up to about 8GHz. Great for testing antennas. That's
> what's inside a Telonic Rho-tector (which can usually be found on eBay
> for cheap). A few models go up to 2.4Ghz.
>
> You'll also *might* need a microwave load or three. 50 ohms for a
> reference, but also some other known values for calibration.
>
> The problem is that you'll need an RF sweep generator to use this
> effectively. It's also not a VNA (vector network analyzer) so it
> won't tell you if any reactance is capacitive or inductive.
>
>

> --
> Jeff Liebermann jeffl@cruzio.com
> 150 Felker St #D http://www.LearnByDestroying.com
> Santa Cruz CA 95060 http://802.11junk.com
> Skype: JeffLiebermann AE6KS 831-336-2558

1106. Re: Site for DIY 2.4Ghz impedance equipment help

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-19 00:37:06 UTC
From: amdx <amdx@knology.net>
Message-ID: <5a2c7$4adbb4ac$18ec6dd7$28328@KNOLOGY.NET>
Source record: 2309
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Brian Howie" <brian@nospam.demon.co.uk> wrote in message
news:KeX$LfD5i32KFwSR@b-howie.demon.co.uk...
> In message <491f3$4adb614e$18ec6dd7$30459@KNOLOGY.NET>, amdx
> <amdx@knology.net> writes
>>Hi all,
>> I saw a site where a fellow designed a unit to measure impedance at 2.4
>>ghz, for use on wifi antennas. I don't recall if it was return loss or
>>impedance.
>>It gave detailed instructions on how to build and he also had ready built
>>units
>>for sale.
>>I think it was a ham that designed the unit. I also think he was not in
>>the
>>states, possibly a P or PY call sign, but the memory is not good!
>> Any help would be appreciated.
>> Thanks, Mike
>>
> This it ?
>
> http://www.frars.org.uk/cgi-bin/render.pl?pageid=1085
>
> 73 Brian GM4DIJ
> --
> Brian Howie

Thanks for the site Brian, that is not the one I was thinking though.

Jeff found the one I wanted,
<http://pe2er.nl/wifiswr/index.htm>
Mike

1107. Re: The dish problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-19 00:40:02 UTC
From: brian whatcott <betwys1@sbcglobal.net>
Message-ID: <MomdnYZ08YgwKEbXnZ2dnUVZ_qGdnZ2d@giganews.com>
Source record: 2310

terry wrote:
...
>> Looking now at the numbers, you know that the effective power density
>> of the Sun at the surface is 700 watts per square meter. Your skin
>> represents say 1.5 sq meters, so you are getting a total power of say 1
>> kilowatt.

....
That 700 watts per sq. metre is an interesting number? Bright sun
> at midday at the equator perhaps?
> But I doubt that here at around 48 degrees north and with our climate
> we get anything close to that?
> Also now wondering how efficient a solar panel is at converting that
> 700 watts into electric power (for say home use). Which may be why
> some 'solar' collectors are both photo-voltaic and heat collecting.

The scientific name for this measure is Solar Irradiance. If you hold up
a square frame 1 meter on a side, perpendicular to the Sun's direction,
in space near Earth's orbital distance, about 1400 watts passes the
frame - and twice as far from the Sun, that frame only frames a quarter
of that amount (of course!)

That number 700 W/m^2 takes into account the absorption of power by
stuff in the atmosphere, more at slant angles of course.

This URL can show the kind of Solar power you can expect at various
geographical coordinates.
http://re.jrc.ec.europa.eu/pvgis/apps/radday.php

You'll see a peak value around noon - and this can be more than 700
W/m^2 at that 48N latitude.

Brian W

1108. Re: Site for DIY 2.4Ghz impedance equipment help

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-19 07:22:17 UTC
From: "Helmut Wabnig"
Message-ID: <3r4od5lktaq1v7jnf8ni4vthfmbg9a3p5f@4ax.com>
Source record: 2311
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sun, 18 Oct 2009 13:41:23 -0500, "amdx" <amdx@knology.net> wrote:

>Hi all,
> I saw a site where a fellow designed a unit to measure impedance at 2.4
>ghz, for use on wifi antennas. I don't recall if it was return loss or
>impedance.
>It gave detailed instructions on how to build and he also had ready built
>units
>for sale.
>I think it was a ham that designed the unit. I also think he was not in the
>states, possibly a P or PY call sign, but the memory is not good!
> Any help would be appreciated.
> Thanks, Mike
>

For the price of 1 tranceiver

http://www.youtube.com/watch?v=N0w5U0Xj1MU

w.

1109. Re: Site for DIY 2.4Ghz impedance equipment help

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-19 08:05:32 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <d37od555a9tl1vkefha0gcesc0u5npne0j@4ax.com>
Source record: 2312
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Mon, 19 Oct 2009 09:22:17 +0200, Helmut Wabnig <hwabnig@ .- --- -.
dotat> wrote:

>For the price of 1 tranceiver
>http://www.youtube.com/watch?v=N0w5U0Xj1MU

Clever but I think the OP wanted test equipment, not tuning methods.
Also, I noticed that the markers were set to 2400.500 and 2900.500MHz
instead of US band limits of 2400.0 and 2483.5Mhz.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

1110. Re: Site for DIY 2.4Ghz impedance equipment help

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-19 11:34:06 UTC
From: amdx <amdx@knology.net>
Message-ID: <a136a$4adc4ea8$18ec6dd7$22389@KNOLOGY.NET>
Source record: 2313
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Jeff Liebermann" <jeffl@cruzio.com> wrote in message
news:d37od555a9tl1vkefha0gcesc0u5npne0j@4ax.com...
> On Mon, 19 Oct 2009 09:22:17 +0200, Helmut Wabnig <hwabnig@ .- --- -.
> dotat> wrote:
>
>>For the price of 1 tranceiver
>>http://www.youtube.com/watch?v=N0w5U0Xj1MU
>
> Clever but I think the OP wanted test equipment, not tuning methods.
> Also, I noticed that the markers were set to 2400.500 and 2900.500MHz
> instead of US band limits of 2400.0 and 2483.5Mhz.
>
> --
> Jeff Liebermann jeffl@cruzio.com
> 150 Felker St #D http://www.LearnByDestroying.com
> Santa Cruz CA 95060 http://802.11junk.com
> Skype: JeffLiebermann AE6KS 831-336-2558

So did the (plexiglas?) change the velocity factor for tuning.
Ya, I'll take his test equipment.
Mike

1111. Re: Site for DIY 2.4Ghz impedance equipment help

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-19 14:39:08 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <5ptod5l4t98pf0km70c0j1crc566jqe2mn@4ax.com>
Source record: 2314
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Mon, 19 Oct 2009 06:34:06 -0500, "amdx" <amdx@knology.net> wrote:

>>>For the price of 1 tranceiver
>>>http://www.youtube.com/watch?v=N0w5U0Xj1MU

>So did the (plexiglas?) change the velocity factor for tuning.

The plastic raised the dielectric constant of the space between the patch and the ground plane. In effect, it increased the effective wavelength of the patch slightly, thus lowering its tuned frequency. You can (accidentally) get the same effect by tuning the antenna, and then placing it inside a PVC radome, which will also slower its tuning frequency. The author will probably find himself re-tuning the plastic piece after he's installed the patch antenna in an enclosure.

>Ya, I'll take his test equipment.
> Mike

Build your own test equipment first. When that fails, mortgage the house, wife, kids, car, dog, cat, toys, etc and buy something better. However, beware of test equipment envy. Once you get on the test equipment upgrade path, nothing you own will be good enough, and there always will be something better.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

1112. Re: Site for DIY 2.4Ghz impedance equipment help

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-19 17:27:53 UTC
From: brian whatcott <betwys1@sbcglobal.net>
Message-ID: <nJednaQfGPVdPEHXnZ2dnUVZ_uidnZ2d@giganews.com>
Source record: 2315
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Brian Howie wrote:
> In message <491f3$4adb614e$18ec6dd7$30459@KNOLOGY.NET>, amdx
> <amdx@knology.net> writes
>> Hi all,
>> I saw a site where a fellow designed a unit to measure impedance at 2.4
>> ghz, for use on wifi antennas. I don't recall if it was return loss or
>> impedance.
>> It gave detailed instructions on how to build and he also had ready built
>> units
>> for sale.
>> I think it was a ham that designed the unit. I also think he was not
>> in the
>> states, possibly a P or PY call sign, but the memory is not good!
>> Any help would be appreciated.
>> Thanks, Mike
>>
> This it ?
>
> http://www.frars.org.uk/cgi-bin/render.pl?pageid=1085
>
> 73 Brian GM4DIJ

This was a cool hamradio site, to my mind. I enjoyed the puzzle about
the unbalanced bridge current. A clear simple description of Thevenin
versus Kirchoff.

Thanks

Brian W

1113. marketplace radioamateur.it

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-19 18:28:06 UTC
From: ezio <iz4hyz@libero.it>
Message-ID: <f27a9943-a625-4119-8c09-8c0e4f2e5650@g3g2000vbr.googlegroups.com>
Source record: 2316

maketplace radioamateur http://www.radioamateur.it

1114. Re: The dish problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-20 23:17:07 UTC
From: raypsi <rborowiak@gmail.com>
Message-ID: <f686f932-8f11-44bd-b8aa-aebfaf5c67f6@33g2000vbe.googlegroups.com>
Source record: 2317

Hey OM

If I look at the node of a source of 20mW and connect 10 wires to that
node with equal loads, I will have 2mW going down each wire. No matter
how I try and add them up I can't get more than 20 mW.

Now I take a 20 mW isotropic emitter, now your'e saying I feed a dish
with that 20mW emitter through a feed horn and now all of a sudden I
have gain, I have more than 20 mW? Because the dish and feed horn are
able to add the particles and waves, where as with 10 wires I cannot
add the waves and particles?

The only difference in both these are the shape of the dish and the
medium used to convey the wave, particles.
And you can add the waves particles until you run out of dish.

73 OM
de n8zu

On Oct 18, 8:40 pm, brian whatcott <betw...@sbcglobal.net> wrote:
> terry wrote:
>
> ...
>
> >> Looking now at the numbers, you know that the effective power density
> >> of the Sun at the surface is 700 watts per square meter. Your skin
> >> represents say 1.5 sq meters, so you are getting a total power of say 1
> >> kilowatt.
>
> ....
> That 700 watts per sq. metre is an interesting number? Bright sun
>
> > at midday at the equator perhaps?
> > But I doubt that here at around 48 degrees north and with our climate
> > we get anything close to that?
> > Also now wondering how efficient a solar panel is at converting that
> > 700 watts into electric power (for say home use). Which may be why
> > some 'solar' collectors are both photo-voltaic and heat collecting.
>
> The scientific name for this measure is Solar Irradiance. If you hold up
> a square frame 1 meter on a side, perpendicular to the Sun's direction,
> in space near Earth's orbital distance, about 1400 watts passes the
> frame - and twice as far from the Sun, that frame only frames a quarter
> of that amount (of course!)
>
> That number 700 W/m^2 takes into account the absorption of power by

> stuff in the atmosphere, more at slant angles of course.
>
> This URL can show the kind of Solar power you can expect at various
> geographical coordinates.http://re.jrc.ec.europa.eu/pvgis/apps/radday.php
>
> You'll see a peak value around noon - and this can be more than 700
> W/m^2 at that 48N latitude.
>
> Brian W

1115. Re: The dish problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-21 00:33:51 UTC
From: Bill M <radioexray@geeemail.com>
Message-ID: <hblkti0jhs@news5.newsguy.com>
Source record: 2318

raypsi wrote:
> Hey OM
>
> If I look at the node of a source of 20mW and connect 10 wires to that
> node with equal loads, I will have 2mW going down each wire. No matter
> how I try and add them up I can't get more than 20 mW.
>
> Now I take a 20 mW isotropic emitter, now your'e saying I feed a dish
> with that 20mW emitter through a feed horn and now all of a sudden I
> have gain, I have more than 20 mW? Because the dish and feed horn are
> able to add the particles and waves, where as with 10 wires I cannot
> add the waves and particles?
>
> The only difference in both these are the shape of the dish and the
> medium used to convey the wave, particles.
> And you can add the waves particles until you run out of dish.
>
>
> 73 OM
> de n8zu
>

Actually your example tends to prove the point that you're questioning.
10 points of 2mw DO add up to 20 mw.

The difference with an isotropic radiator is that there are an infinite
number of points each at say 20mw. Add 'em up by focusing those points
into a single path.

If you can rationalize a 20mw transmitter feeding one direction down a
feedline or waveguide and still getting 20mw EIRP in ALL directions with
an isotropic radiator then it should make sense.

-Bill

1116. Re: The dish problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-21 00:39:41 UTC
From: brian whatcott <betwys1@sbcglobal.net>
Message-ID: <C4mdnbW1CMzyxUPXnZ2dnUVZ_rednZ2d@giganews.com>
Source record: 2319

raypsi wrote:

> Hey OM
>
> If I look at the node of a source of 20mW and connect 10 wires to that
> node with equal loads, I will have 2mW going down each wire. No matter
> how I try and add them up I can't get more than 20 mW.

Correct.
>
> Now I take a 20 mW isotropic emitter, now you're saying I feed a dish
> with that 20mW emitter through a feed horn and now all of a sudden I
> have gain, I have more than 20 mW?

Not exactly, I am saying you have a gain in power DENSITY
i.e watts per sq meter. In a desired direction only, naturally.

Like when you use a magnifying glass to collect the Sun's power into a
small spot.

> 73 OM
> de n8zu

1117. Modeling an FM transmitter with LTspice?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-21 14:31:36 UTC
From: "dave.harper" <dave.harper@gmail.com>
Message-ID: <452cfa58-f0c3-4544-a8eb-cea0507a1ad9@z34g2000vbl.googlegroups.com>
Source record: 2320
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

I'm trying to model an FM transmitter with LTspice. The schematic of the circuit I'm trying to model is shown here:

http://www.sentex.ca/~mec1995/circ/fmt1.htm

It takes a while to start oscillating, but when it does reach a steady oscillation, the lower half of the waveforms look a little distorted. Interestingly, when I reduce the inductor value (to say .01uH), the waveforms are less distorted, but when I only decrease the capacitor (to say 3pF), the waveforms become more distorted. Any insight into the source of this distortion?

Could it be that I need to model an equivalent antenna?

I've copied the LTspice .asc file below.

Thanks in advance!
Dave

```
---------------------------------
Version 4
SHEET 1 928 680
WIRE 160 -144 48 -144
WIRE 272 -144 272 -176
WIRE 272 -144 160 -144
WIRE 416 -144 272 -144
WIRE 528 -144 416 -144
WIRE 624 -144 528 -144
WIRE 704 -144 624 -144
WIRE 416 -128 416 -144
WIRE 704 -128 704 -144
WIRE 528 -112 528 -144
WIRE 624 -112 624 -144
WIRE 48 -96 48 -144
WIRE 160 -96 160 -144
WIRE 272 -96 272 -144
WIRE -384 -80 -384 -128
WIRE -336 -80 -384 -80
WIRE -224 -80 -256 -80
WIRE -144 -80 -144 -128
WIRE -144 -80 -224 -80
WIRE -144 -48 -144 -80
WIRE 416 -48 368 -48
WIRE 528 -48 416 -48
WIRE -384 -32 -384 -80
```

```
WIRE -224 -32 -224 -80
WIRE 336 -16 272 -16
WIRE 144 0 96 0
WIRE 624 0 624 -48
WIRE 704 0 704 -48
WIRE 704 0 624 0
WIRE 336 16 336 -16
WIRE 368 16 336 16
WIRE 144 32 144 0
WIRE 160 32 160 -16
WIRE 160 32 144 32
WIRE 208 32 160 32
WIRE 416 48 416 -48
WIRE 560 48 416 48
WIRE 48 64 48 -16
WIRE 96 64 48 64
WIRE -384 80 -384 48
WIRE -224 80 -224 48
WIRE -144 80 -144 16
WIRE 160 96 160 32
WIRE 272 96 272 80
WIRE 704 96 704 64
WIRE 704 96 624 96
WIRE 48 176 48 144
WIRE 160 176 48 176
WIRE 272 176 160 176
WIRE 416 176 272 176
WIRE 512 176 416 176
WIRE 624 176 624 96
WIRE 624 176 592 176
WIRE 416 192 416 176
FLAG -384 80 0
FLAG -384 -128 +9V
FLAG -144 80 0
FLAG -224 80 0
FLAG -144 -128 +4.5V
FLAG 272 -176 +9V
FLAG 416 192 0
SYMBOL voltage -384 -48 R0
WINDOW 123 0 0 Left 0
WINDOW 39 0 0 Left 0
WINDOW 0 -66 54 Left 0
WINDOW 3 47 51 Left 0
SYMATTR InstName V1
SYMATTR Value 9
SYMBOL res -352 -64 R270
WINDOW 0 32 56 VTop 0
WINDOW 3 0 56 VBottom 0
SYMATTR InstName R6
SYMATTR Value 1k
```

```
SYMBOL res -240 -48 R0
SYMATTR InstName R7
SYMATTR Value 1k
SYMBOL polcap -160 -48 R0
SYMATTR InstName C3
SYMATTR Value 10µ
SYMBOL res 32 -112 R0
SYMATTR InstName R2
SYMATTR Value 10k
SYMBOL res 144 -112 R0
SYMATTR InstName R3
SYMATTR Value 1000k
SYMBOL res 256 -112 R0
SYMATTR InstName R8
SYMATTR Value 10k
SYMBOL res 144 80 R0
SYMATTR InstName R9
SYMATTR Value 100k
SYMBOL res 256 80 R0
SYMATTR InstName R11
SYMATTR Value 100
SYMBOL res 400 -144 R0
SYMATTR InstName R12
SYMATTR Value 10k
SYMBOL polcap 512 -112 R0
SYMATTR InstName C1
SYMATTR Value .01µ
SYMBOL polcap 608 -112 R0
SYMATTR InstName C2
SYMATTR Value 30pF
SYMBOL cap 352 -48 R0
SYMATTR InstName C5
SYMATTR Value .1µF
SYMBOL npn 208 -16 R0
SYMATTR InstName Q1
SYMATTR Value 2N3904
SYMBOL cap 80 0 R0
SYMATTR InstName C6
SYMATTR Value .1µF
SYMBOL npn 560 0 R0
SYMATTR InstName Q2
SYMATTR Value 2N3904
SYMBOL res 496 192 R270
WINDOW 0 32 56 VTop 0
WINDOW 3 0 56 VBottom 0
SYMATTR InstName R13
SYMATTR Value 1k
SYMBOL ind 688 -144 R0
SYMATTR InstName L1
SYMATTR Value .1µH
```

```
SYMBOL cap 688 0 R0
SYMATTR InstName C4
SYMATTR Value 4.7pF
SYMBOL res 32 48 R0
SYMATTR InstName R1
SYMATTR Value 10
TEXT -440 -464 Left 0 !.tran 0 5u 0 .0001u
TEXT -440 -424 Left 0 !.ic V(in1)=2.7
TEXT -440 -512 Left 0 ;FM transmitter
```

1118. Re: Modeling an FM transmitter with LTspice?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-21 16:11:07 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <AN-dnTK6mskGr0LXnZ2dnUVZ_jJi4p2d@web-ster.com>
Source record: 2321
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Wed, 21 Oct 2009 07:31:36 -0700, dave.harper wrote:

> I'm trying to model an FM transmitter with LTspice. The schematic of
> the circuit I'm trying to model is shown here:
>
> http://www.sentex.ca/~mec1995/circ/fmt1.htm
>
> It takes a while to start oscillating, but when it does reach a steady
> oscillation, the lower half of the waveforms look a little distorted.
> Interestingly, when I reduce the inductor value (to say .01uH), the
> waveforms are less distorted, but when I only decrease the capacitor (to
> say 3pF), the waveforms become more distorted. Any insight into the
> source of this distortion?
>
> Could it be that I need to model an equivalent antenna?
>
> I've copied the LTspice .asc file below.
>
> Thanks in advance!
> Dave
>

What are you trying to find out with your simulation? Simulation is usually either pointless or time consuming unless you have some narrow thing to look for, and have a good idea what it is.

I suspect that the waveform distortion is related to the impedance of the tank more than the resonant frequency. Reducing the inductor value lowers impedance and raises frequency; reducing the capacitor value raises impedance and frequency together.

Yes, you probably need to model an equivalent antenna. In fact, for many things you may want to find out from simulation you would need to model several different equivalent antennas.

--
www.wescottdesign.com

1119. Re: Modeling an FM transmitter with LTspice?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-21 18:53:52 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <cvmdnYis6slVxULXnZ2dnUVZ_uSdnZ2d@giganews.com>
Source record: 2322
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

dave.harper wrote:
> I'm trying to model an FM transmitter with LTspice. The schematic of
> the circuit I'm trying to model is shown here:
>
> http://www.sentex.ca/~mec1995/circ/fmt1.htm
>
> It takes a while to start oscillating, but when it does reach a steady
> oscillation, the lower half of the waveforms look a little distorted.
> Interestingly, when I reduce the inductor value (to say .01uH), the
> waveforms are less distorted, but when I only decrease the capacitor
> (to say 3pF), the waveforms become more distorted. Any insight into
> the source of this distortion?
>
> Could it be that I need to model an equivalent antenna?
>
> I've copied the LTspice .asc file below.
>
> Thanks in advance!
> Dave

In order to start, an oscillator has a loop gain greater than one. This causes the oscillation amplitude to continually increase. Eventually, the amplitude is limited by something nonlinear, since it can't increase forever. Oscillators designed for low noise, high stability, or other precise characteristics have some stable limiting mechanism such as diodes to limit the amplitude at a known value. Most, like this one, depend on distortion caused by overdriving one or both transistors to limit the amplitude. Consequently, distortion virtually always occurs(*). To get a clean output requires filtering, and the more distortion in the basic feedback waveform, the better the filtering required. All this circuit has is a single tank circuit in one transistor collector. The loaded Q of this circuit is just too low and the fundamental distortion too great to get a clean waveform. Adding an antenna might help or hurt the distortion, depending on the type of antenna -- it might filter some harmonics but not others, and at resonance it'll further load the tank. You might try tapping the collector and antenna down on the tank, but I'd be prone to add some additional filtering between the tank and antenna. Even that might not work as you expect because of the complex way the antenna impedance changes with frequency, but it'll help.

(*) It's usually not practical to filter audio oscillators, so some low distortion audio oscillators are made by using feedback limiting that has a very slow time constant -- one that's many cycles of the waveform.

A light bulb is often used for the limiter. In general, you can trade loop gain for distortion -- the closer you make the loop gain in the linear region to 1, the less distortion you get. But the slower it starts, and it won't start at all if anything like temperature or component value variation drops the loop gain below 1.

Roy Lewallen, W7EL

1120. Re: Modeling an FM transmitter with LTspice?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-21 18:58:08 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <ee127daa-5743-47c1-8703-8209874a368a@l34g2000vba.googlegroups.com>
Source record: 2323
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Oct 21, 12:11 pm, Tim Wescott <t...@seemywebsite.com> wrote:
> On Wed, 21 Oct 2009 07:31:36 -0700, dave.harper wrote:
> > I'm trying to model an FM transmitter with LTspice. The schematic of
> > the circuit I'm trying to model is shown here:
>
> >http://www.sentex.ca/~mec1995/circ/fmt1.htm
>
> > It takes a while to start oscillating, but when it does reach a steady
> > oscillation, the lower half of the waveforms look a little distorted.
> > Interestingly, when I reduce the inductor value (to say .01uH), the
> > waveforms are less distorted, but when I only decrease the capacitor (to
> > say 3pF), the waveforms become more distorted. Any insight into the
> > source of this distortion?
>
> > Could it be that I need to model an equivalent antenna?
>
> > I've copied the LTspice .asc file below.
>
> > Thanks in advance!
> > Dave
>
> What are you trying to find out with your simulation? Simulation is
> usually either pointless or time consuming unless you have some narrow
> thing to look for, and have a good idea what it is.
>
> I suspect that the waveform distortion is related to the impedance of the
> tank more than the resonant frequency. Reducing the inductor value
> lowers impedance and raises frequency; reducing the capacitor value
> raises impedance and frequency together.
>
> Yes, you probably need to model an equivalent antenna. In fact, for many
> things you may want to find out from simulation you would need to model
> several different equivalent antennas.
>
> --www.wescottdesign.com- Hide quoted text -
>
> - Show quoted text -

Whoever said to expect something like a clean signal from a
transmitter like that in the first place. I ve build a few of those
little toy FM transmitters and the output is far from clean. Unless
this is just an exercise in Spice modeling
its probably a waste of time to do so. Intead of worrying about the

antenna I would try to figure out what was the best load for the circuit and design an antenna to meet that requirement otherwise I would just hang a 8 inch piece of hookup wire off it aand call it done.

Jimmie

1121. Re: Modeling an FM transmitter with LTspice?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-21 22:58:12 UTC
From: Brian Howie <brian@nospam.demon.co.uk>
Message-ID: <MA5essBEI53KFw6a@b-howie.demon.co.uk>
Source record: 2324
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In message
<452cfa58-f0c3-4544-a8eb-cea0507a1ad9@z34g2000vbl.googlegroups.com>,
dave.harper <dave.harper@gmail.com> writes
>I'm trying to model an FM transmitter with LTspice. The schematic of
>the circuit I'm trying to model is shown here:
>
>http://www.sentex.ca/~mec1995/circ/fmt1.htm
>
>It takes a while to start oscillating, but when it does reach a steady
>oscillation, the lower half of the waveforms look a little distorted.
>Interestingly, when I reduce the inductor value (to say .01uH), the
>waveforms are less distorted, but when I only decrease the capacitor
>(to say 3pF), the waveforms become more distorted. Any insight into
>the source of this distortion?
>
>Could it be that I need to model an equivalent antenna?
>
>I've copied the LTspice .asc file below.

I ran the file. It looks like the output voltage is forward biasing the
collector-base junction of the output transistor Q2 , causing some
clipping. Q2 is saturating.

Brian GM4DIJ
--
Brian Howie

1122. Re: Modeling an FM transmitter with LTspice?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-21 23:34:24 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <H42dnZ8vz_sdB0LXnZ2dnUVZ_vmdnZ2d@web-ster.com>
Source record: 2325
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Wed, 21 Oct 2009 11:58:08 -0700, JIMMIE wrote:

> On Oct 21, 12:11 pm, Tim Wescott <t...@seemywebsite.com> wrote:
>> On Wed, 21 Oct 2009 07:31:36 -0700, dave.harper wrote:
>> > I'm trying to model an FM transmitter with LTspice. The schematic of
>> > the circuit I'm trying to model is shown here:
>>
>> >http://www.sentex.ca/~mec1995/circ/fmt1.htm
>>
>> > It takes a while to start oscillating, but when it does reach a
>> > steady oscillation, the lower half of the waveforms look a little
>> > distorted. Interestingly, when I reduce the inductor value (to say
>> > .01uH), the waveforms are less distorted, but when I only decrease
>> > the capacitor (to say 3pF), the waveforms become more distorted. Any
>> > insight into the source of this distortion?
>>
>> > Could it be that I need to model an equivalent antenna?
>>
>> > I've copied the LTspice .asc file below.
>>
>> > Thanks in advance!
>> > Dave
>>
>> What are you trying to find out with your simulation? Simulation is
>> usually either pointless or time consuming unless you have some narrow
>> thing to look for, and have a good idea what it is.
>>
>> I suspect that the waveform distortion is related to the impedance of
>> the tank more than the resonant frequency. Reducing the inductor value
>> lowers impedance and raises frequency; reducing the capacitor value
>> raises impedance and frequency together.
>>
>> Yes, you probably need to model an equivalent antenna. In fact, for
>> many things you may want to find out from simulation you would need to
>> model several different equivalent antennas.
>>
>> --www.wescottdesign.com- Hide quoted text -
>>
>> - Show quoted text -
>
> Whoever said to expect something like a clean signal from a transmitter
> like that in the first place. I ve build a few of those little toy FM
> transmitters and the output is far from clean. Unless this is just an

> exercise in Spice modeling
> its probably a waste of time to do so. Intead of worrying about the
> antenna I would try to figure out what was the best load for the circuit
> and design an antenna to meet that requirement otherwise I would just
> hang a 8 inch piece of hookup wire off it aand call it done.

I was going to suggest that if he wants a clean signal he should probably
filter the snot out of the signal, and maybe even buffer it.

But he didn't ask...

--
www.wescottdesign.com

1123. Re: Modeling an FM transmitter with LTspice?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-22 00:00:02 UTC
From: brian whatcott <betwys1@sbcglobal.net>
Message-ID: <3uydndywrvk6PULXnZ2dnUVZ_uKdnZ2d@giganews.com>
Source record: 2326
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

dave.harper wrote:
> I'm trying to model an FM transmitter with LTspice. The schematic of
> the circuit I'm trying to model is shown here:
>
> http://www.sentex.ca/~mec1995/circ/fmt1.htm
>
> It takes a while to start oscillating, but when it does reach a steady
> oscillation, the lower half of the waveforms look a little distorted.
> Interestingly, when I reduce the inductor value (to say .01uH), the
> waveforms are less distorted, but when I only decrease the capacitor
> (to say 3pF), the waveforms become more distorted. Any insight into
> the source of this distortion?
>
> Could it be that I need to model an equivalent antenna?
>
> I've copied the LTspice .asc file below.
>
> Thanks in advance!
> Dave
>
That would be my guess too....I suspect you have set the output tuned
circuit Q way high. Tapping the antenna into the coil might serve you
better, and placing a small resistor in the emitter path before the
feedback cap would hold the gain down, but planting a resistor to
represent the antenna load might do the trick right there??

Brian W

1124. antenna part question??

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-22 23:44:41 UTC
From: Ron <ronnclair@yahoo.com>
Message-ID: <K76Em.75833$IR3.75308@newsfe25.iad>
Source record: 2327

Hi
I have the Delhi selfsupporting tower, it is 48ft tall I believe, an old ham tower. It has the top piece plate but I need the plate that is about 5 ft down. The previous owner of the tower made some home made ones for each 1/3 length of the tower but now I need the replacement for the one plate that I can connect the angle brackets that hold the u bolts that hold the masting. I went to to a local tv distributor now who sells the tower but not the replacement parts. I also need those angle brackets. I am in Southern Ontario. Any ideas where there are shops or ham fests in this area soon?

Thanks

1125. Re: antenna part question??

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-23 00:01:53 UTC
From: Bill M <radioexray@geeemail.com>
Message-ID: <hbqrpj02qtp@news5.newsguy.com>
Source record: 2328

Ron wrote:
> Hi
> I have the Delhi selfsupporting tower, it is 48ft tall I believe, an old
> ham
> tower. It has the top piece plate but I need the plate that is about 5 ft
> down. The previous owner of the tower made some home made ones for each 1/3
> length of the tower but now I need the replacement for the one plate that I
> can connect the angle brackets that hold the u bolts that hold the masting.
> I went to to a local tv distributor now who sells the tower but not the
> replacement parts. I also need those angle brackets. I am in Southern
> Ontario. Any ideas where there are shops or ham fests in this area soon?
>
> Thanks
>
Try here for info:
http://www.tacocommunications.com/

I think they make the Delhi towers.

-Bill

1126. FA: Nice, roomy, well-made cabinet (UK)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-23 10:29:16 UTC
From: Richard <nearlynews_email@ntlworld.com>
Message-ID: <7kdesvF36s1pvU1@mid.individual.net>
Source record: 2329

http://cgi.ebay.co.uk/ws/eBayISAPI.dll?ViewItem&item=230391194033&ssPageName=STRK:MESELX:IT

Is in fact an Hallicrafters cabinet (HT32A). Top opens up. Thanks for looking.

1127. Re: The dish problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-23 16:24:39 UTC
From: raypsi <rborowiak@gmail.com>
Message-ID: <603e90c3-a85a-48dc-b38c-39ac6b96a3cd@j9g2000vbp.googlegroups.com>
Source record: 2330

Hey OM:

I tell you what. I took just 1 particle wave and shoot the particle wave into a 60db dish. At the focus I got 1,000,000 partivle waves. I mean that is 60 db right?

So where did the other 999,999 particles come from? Energy density from focusing just one particle?

The two slot experiment buttresses the above.

Take 2 parallel slots shoot just one particle wave into just one slot and 2 particle waves come out the other side.

73 OM
de n8zu

1128. Re: The dish problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-23 17:23:54 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <bfd6d879-7893-4c14-9ea8-0bf18aa6f825@x5g2000prf.googlegroups.com>
Source record: 2331

Take a small light bulb, it shines light in many directions.

Place this at the focal point of a mirrored parabolic dish and the
light is predominantly directed in one direction.

In the direction that the dish is pointing, and at a distance, measure
the received light using a light meter.

Remove the dish, and at the same distance, measure the received light
using a light meter from the naked bulb.

One measurement will be higher than the other.

Why do you think this might be ?

On Oct 24, 5:24 am, raypsi <rborow...@gmail.com> wrote:
> Hey OM:
>
> I tell you what. I took just 1 particle wave and shoot the particle
> wave into a 60db dish. At the focus I got 1,000,000 partivle waves. I
> mean that is 60 db right?
>
> So where did the other 999,999 particles come from? Energy density
> from focusing just one particle?
>
> The two slot experiment buttresses the above.
>
> Take 2 parallel slots shoot just one particle wave into just one slot
> and 2 particle waves come out the other side.
>
> 73 OM
> de n8zu

1129. Re: The dish problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-24 00:25:09 UTC
From: brian whatcott <betwys1@sbcglobal.net>
Message-ID: <CqWdnY5zG9wO13_XnZ2dnUVZ_udi4p2d@giganews.com>
Source record: 2332

raypsi wrote:
> Hey OM:
>
> I tell you what. I took just 1 particle wave [per sq meter] and shoot the particle
> wave into a 60db dish. At the focus I got 1,000,000 particle waves [per sq meter]. I
> mean that is 60 db right?

Yes.
>
> So where did the other 999,999 particles come from? Energy density
> from focusing just one particle?

NOW, you're getting it! No more particles, but more particle density,
when the flux is directed tightly...

> The two slot experiment buttresses the above.
>
> Take 2 parallel slots shoot just one particle wave into just one slot
> and 2 particle waves come out the other side.
>
> 73 OM
> de n8zu

Actually no. But you probably realized that. Or did you?

I am not pursuing this much further, because you are starting to respond
like a person who wants to drag out an argument.

Listen to me when I say: "I can be wrong. I often am."

Can you say that too, with some sincerity? :-)

Brian W

:-)

1130. Re: The dish problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-24 00:27:15 UTC
From: brian whatcott <betwys1@sbcglobal.net>
Message-ID: <CqWdnYlzG9yM1n_XnZ2dnUVZ_udi4p2d@giganews.com>
Source record: 2333

Nice concrete example, Mark.
The same conclusion holds if the bulb is so dim, that it only emits one
photon at intervals.

Brian W

MarkAren wrote:
> Take a small light bulb, it shines light in many directions.
>
> Place this at the focal point of a mirrored parabolic dish and the
> light is predominantly directed in one direction.
>
> In the direction that the dish is pointing, and at a distance, measure
> the received light using a light meter.
>
> Remove the dish, and at the same distance, measure the received light
> using a light meter from the naked bulb.
>
> One measurement will be higher than the other.
>
> Why do you think this might be ?
>
>
> On Oct 24, 5:24 am, raypsi <rborow...@gmail.com> wrote:
>> Hey OM:
>>
>> I tell you what. I took just 1 particle wave and shoot the particle
>> wave into a 60db dish. At the focus I got 1,000,000 partivle waves. I
>> mean that is 60 db right?
>>
>> So where did the other 999,999 particles come from? Energy density
>> from focusing just one particle?
>>
>> The two slot experiment buttresses the above.
>>
>> Take 2 parallel slots shoot just one particle wave into just one slot
>> and 2 particle waves come out the other side.
>>
>> 73 OM
>> de n8zu
>

1131. Naked Photos sex very hot sexy girls womans

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-24 17:46:49 UTC
From: gfghfghfgh <resourts08@gmail.com>
Message-ID: <d3968236-368b-4563-934d-940ea3bdf9a7@31g2000vbf.googlegroups.com>
Source record: 2334

Naked Photos sex very hot sexy girls womans

http://beautiful-hot-girls-photo.blogspot.com

1132. Re: The dish problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-24 18:47:09 UTC
From: raypsi <rborowiak@gmail.com>
Message-ID: <00b710fb-5616-4f32-a513-b01d226e79cb@p9g2000vbl.googlegroups.com>
Source record: 2335

Hey OM

By golly ole timer you hit the nail on the head.

I don't pay no stinking taxes, in the W-4 form I put "EXEMPT" where it
asks for number of deductions, and when I file my 1040 it says at the
end of the form REFUND DUE, in four figures, for the last several
years. Now that is legit, but it sure is WRONG, at least that is what
everyone tells me.

Your trouble is you pay taxes, where as I don't. Now that is energy
density.

73 OM
de n8zu

On Oct 23, 8:25 pm, brian whatcott <betw...@sbcglobal.net> wrote:
> raypsi wrote:
> > Hey OM:
>
> > I tell you what. I took just 1 particle wave [per sq meter] and shoot the particle
> > wave into a 60db dish. At the focus I got 1,000,000 particle waves [per sq meter]. I
> > mean that is 60 db right?
>
> Yes.
>
>
>
> > So where did the other 999,999 particles come from? Energy density
> > from focusing just one particle?
>
> NOW, you're getting it! No more particles, but more particle density,
> when the flux is directed tightly...
>
> > The two slot experiment buttresses the above.
>
> > Take 2 parallel slots shoot just one particle wave into just one slot
> > and 2 particle waves come out the other side.
>
> > 73 OM
> > de n8zu
>
> Actually no. But you probably realized that. Or did you?
>
> I am not pursuing this much further, because you are starting to respond
> like a person who wants to drag out an argument.

>
> Listen to me when I say: "I can be wrong. I often am."
>
> Can you say that too, with some sincerity? :-)
>
> Brian W
>
> :-)

1133. Re: The dish problem

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-24 19:01:42 UTC
From: Bill M <radioexray@geeemail.com>
Message-ID: <hbvj5s02odc@news6.newsguy.com>
Source record: 2336

raypsi wrote:
> Hey OM
>
> By golly ole timer you hit the nail on the head.
>
> I don't pay no stinking taxes, in the W-4 form I put "EXEMPT" where it
> asks for number of deductions, and when I file my 1040 it says at the
> end of the form REFUND DUE, in four figures, for the last several
> years. Now that is legit, but it sure is WRONG, at least that is what
> everyone tells me.
>
> Your trouble is you pay taxes, where as I don't. Now that is energy
> density.
>
> 73 OM
> de n8zu

Ah, now I see the real 'problem' :)

-Bill

1134. Right-to-left schematics?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-25 13:41:04 UTC
From: sorry-spammers <"w9wi\\@(sorry-spammers)">
Message-ID: <R_GdnXLdacoWyHnXnZ2dnUVZ_judnZ2d@earthlink.com>
Source record: 2337

Yep, this is an off-the-wall question.....

Paging through an old QST, it dawned on me that when schematics are drawn, usually the earliest stages are drawn on the left side of the diagram. The
speech input circuits for a voice transmitter; the antenna coupling and RF preamp (if any) for a receiver, etc., all seem to be drawn on the left.

In the tube days at least (and to some degree with solid-state homebrew today) we seem to build the actual equipment the same way: the earliest stages
are physically on the left side of the gear.

Of course, in Western culture we also read and write from left to right. I suppose we learn to look for the beginning of a story on the left side of
the page.

And of course, in some other cultures, people read and write from *right to left*.

When people from these cultures become involved in radio, do they draw schematics (and build gear?) in the same direction Westerners do? Or do they
work "backwards"?

--

Doug Smith W9WI
Pleasant View, TN EM66

1135. Re: Right-to-left schematics?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-25 14:29:57 UTC
From: Kenneth Scharf <wa2mze@bellsouth.net>
Message-ID: <hc1n5s$lf0$1@news.eternal-september.org>
Source record: 2338

sorry-spammers wrote:
> Yep, this is an off-the-wall question.....
>
> Paging through an old QST, it dawned on me that when schematics are
> drawn, usually the earliest stages are drawn on the left side of the
> diagram. The speech input circuits for a voice transmitter; the antenna
> coupling and RF preamp (if any) for a receiver, etc., all seem to be
> drawn on the left.
>
> In the tube days at least (and to some degree with solid-state homebrew
> today) we seem to build the actual equipment the same way: the earliest
> stages are physically on the left side of the gear.
>
> Of course, in Western culture we also read and write from left to
> right. I suppose we learn to look for the beginning of a story on the
> left side of the page.
>
>
> And of course, in some other cultures, people read and write from *right
> to left*.
>
> When people from these cultures become involved in radio, do they draw
> schematics (and build gear?) in the same direction Westerners do? Or do
> they work "backwards"?
>
I've always wondered why some languages were written from right to left.
Could it be that in some cultures left handed people were more common
than right handed?

Actually, I think the answer lies in the fact that some early writing
was done not on paper like material with charcoal or ink, but with stone
tablets and chisels. Since a right handed person would hold the chisel
with his left hand to strike it with a hammer held in his right, the
characters would be written from right to left. So ancient languages
like Hebrew would have been written from right to left, and still are
even though nothing is carved in stone anymore.

1136. Re: Right-to-left schematics?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-25 14:49:04 UTC
From: "Geoffrey S. Mendelson" <gsm@mendelson.com>
Message-ID: <slrnhe8p3q.tjf.gsm@cable.mendelson.com>
Source record: 2339

Kenneth Scharf wrote:

> Actually, I think the answer lies in the fact that some early writing
> was done not on paper like material with charcoal or ink, but with stone
> tablets and chisels. Since a right handed person would hold the chisel
> with his left hand to strike it with a hammer held in his right, the
> characters would be written from right to left. So ancient languages
> like Hebrew would have been written from right to left, and still are
> even though nothing is carved in stone anymore.

While Hebrew words are written right to left, in Israel, numbers are not.

Dates are the European format, dd/mm/yy. Telephone numbers used to be six digits 123-456 and they went to 7 digits a digit was added at the begining, so the they became 1234-567.

Did pre WWII schematics in China and Japan go right to left? I know that Japan had a thriving electronics industry and university level studies.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM

1137. Re: Right-to-left schematics?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-25 15:00:43 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <7rp8e5hp831metkq7ean4ftpqqsmrqt93g@4ax.com>
Source record: 2340

On Sun, 25 Oct 2009 10:29:57 -0400, Kenneth Scharf
<wa2mze@bellsouth.net> wrote:

>I've always wondered why some languages were written from right to left.
> Could it be that in some cultures left handed people were more common
>than right handed?
>
>Actually, I think the answer lies in the fact that some early writing
>was done not on paper like material with charcoal or ink, but with stone
>tablets and chisels. Since a right handed person would hold the chisel
>with his left hand to strike it with a hammer held in his right, the
>characters would be written from right to left. So ancient languages
>like Hebrew would have been written from right to left, and still are
>even though nothing is carved in stone anymore.

Some old scripts used bidirectional writing, with one line going from
left to right and the next right to left
http://en.wikipedia.org/wiki/Boustrophedon

Some schematics appears to be drawn in this way too.

Paul

1138. ADC-40 FI ? (KD1JV QRP)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-26 14:02:57 UTC
From: QRP'er <nexistepas@free.fr>
Message-ID: <4ae5ac11$0$972$ba4acef3@news.orange.fr>
Source record: 2341

HI,
I'm building the ADC-40 made by KD1JV.
I would like to know what kind of 10.7 FI is used as filter because there are several type of FI with different characteristics spotted by different color.

Could someone tell me the color I need ?

Thanks a lot.

Here the link of ADC-40 : http://kd1jv.qrpradio.com/ADC/ADC-40.htm

72

1139. Re: Right-to-left schematics?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-26 14:31:57 UTC
From: terry <tsanford@nf.sympatico.ca>
Message-ID: <680d9131-91c5-494d-b4aa-9e08f5669d8c@d4g2000vbm.googlegroups.com>
Source record: 2342

On Oct 25, 11:49 am, "Geoffrey S. Mendelson" <g...@mendelson.com>
wrote:
> Kenneth Scharf wrote:
> > Actually, I think the answer lies in the fact that some early writing
> > was done not on paper like material with charcoal or ink, but with stone
> > tablets and chisels. Since a right handed person would hold the chisel
> > with his left hand to strike it with a hammer held in his right, the
> > characters would be written from right to left. So ancient languages
> > like Hebrew would have been written from right to left, and still are
> > even though nothing is carved in stone anymore.
>
> While Hebrew words are written right to left, in Israel, numbers are not.
>
> Dates are the European format, dd/mm/yy. Telephone numbers used to be six digits
> 123-456 and they went to 7 digits a digit was added at the beginning, so the they
> became 1234-567.
>
> Did pre WWII schematics in China and Japan go right to left? I know that Japan
> had a thriving electronics industry and university level studies.
>
> Geoff.
>
> --
> Geoffrey S. Mendelson, Jerusalem, Israel g...@mendelson.com N3OWJ/4X1GM

Re telephone numbers. Historically smaller telephone systems had
various numbers of digits! Sometimes as few as three digits.
In large cities such as New York, London, early systems used letters
not digits to identify the switching centre. So an operator would be
asked "Get me Yonkers 2348" etc.
A famous telephone number was WHI-1212 (Namely; Whitehall one two one
two, for Scotland Yard, UK's federal police at the time).
With introduction of long distance dialling it then became was
necessary to have other WHn telephone switching exchanges. Lets' say
there was a WHITCHURCH for example. WHI could not be use for both! So
WH2 and then WH3 were used.
Eventually using letters became too cumbersome and switching offices
(in North America at least) became "All number".
For example I live in an area where the switching office code is 437-.
It's a small area and not all the possible numbers within 437- are
used. However with today's portability of numbers and computer
directed switching the concept of a switching exchange serving only
one geographic area has completely changed.
The concept of three digits identifying a switching unit within which

one could have ten thousand individual telephone subscriber numbers 0000 to 9999, along with three digit 'Area Codes' for the various provinces, cities and states in North America also worked well and is in use today. Heavily populated areas have several (many) area codes. While lightly populated ones may not use more than a small percentage of the theoretically possible one million combinations within each area code.

1140. Re: Right-to-left schematics?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-26 15:34:05 UTC
From: "Geoffrey S. Mendelson" <gsm@mendelson.com>
Message-ID: <slrnhebg55.o3a.gsm@cable.mendelson.com>
Source record: 2343

terry wrote:

> A famous telephone number was WHI-1212 (Namely; Whitehall one two one
> two, for Scotland Yard, UK's federal police at the time).

Pennsylvania 6 5000 (in New York City)

http://www.youtube.com/watch?v=i0m6i1HQxN8

In use since 1919.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM

1141. Re: ADC-40 FI ? (KD1JV QRP)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-26 18:54:53 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <fa8b9ed2-0f9f-4bd0-b97c-0f1e50b275e3@m3g2000pri.googlegroups.com>
Source record: 2344

On Oct 26, 10:02 am, "QRP'er" <nexiste...@free.fr> wrote:
> HI,
> I'm building the ADC-40 made by KD1JV.
> I would like to know what kind of 10.7 FI is used as filter because there
> are several type of FI with different characteristics spotted by different
> color.
>
> Could someone tell me the color I need ?
>
> Thanks a lot.
>
> Here the link of ADC-40 :http://kd1jv.qrpradio.com/ADC/ADC-40.htm

He says he used a Mouser 42IF123 "green" IF transformer but he notes
that 42IF122 "brown" works too. It's there primarily to be a easy 7
MHz resonant circuit although the impedance transformation is a useful
side effect here.

Tim.

1142. Re: ADC-40 FI ? (KD1JV QRP)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-26 19:36:52 UTC
From: QRP'er <nexistepas@free.fr>
Message-ID: <4ae5fa54$0$961$ba4acef3@news.orange.fr>
Source record: 2345

> I'm building the ADC-40 made by KD1JV.
> I would like to know what kind of 10.7 FI is used as filter because there
> are several type of FI with different characteristics spotted by different
> color.

He says he used a Mouser 42IF123 "green" IF transformer but he notes
that 42IF122 "brown" works too. It's there primarily to be a easy 7
MHz resonant circuit although the impedance transformation is a useful
side effect here.

Thanks a lot Tim.
But it is amazing because the two FI have very different impedances :
42IF122 = 15K/0.3K
42IF123 = 25K/4K
Which are rather distant from one another...

OK I will try

1143. Re: ADC-40 FI ? (KD1JV QRP)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-26 21:01:39 UTC
From: Dave M <masondg4499@comcast.net>
Message-ID: <EZudnQw85e-pk3vXnZ2dnUVZ_j-dnZ2d@giganews.com>
Source record: 2346

QRP'er wrote:
>> I'm building the ADC-40 made by KD1JV.
>> I would like to know what kind of 10.7 FI is used as filter because
>> there are several type of FI with different characteristics spotted
>> by different color.
>
> He says he used a Mouser 42IF123 "green" IF transformer but he notes
> that 42IF122 "brown" works too. It's there primarily to be a easy 7
> MHz resonant circuit although the impedance transformation is a useful
> side effect here.
>
> Thanks a lot Tim.
> But it is amazing because the two FI have very different impedances :
> 42IF122 = 15K/0.3K
> 42IF123 = 25K/4K
> Which are rather distant from one another...
>
> OK I will try

I think the objective of the 10.7 MHz IF transformers here is their ability
to be retuned to resonate in the 40M band (7000-7300 KHz). The actual
impedances aren't critical as long as 40M resonance can be achieved.

--
David
masondg44 at comcast dot net

1144. osc coil

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-27 09:50:49 UTC
From: mark <bk416@lafn.org>
Message-ID: <hc6fps$293k$1@zook.lafn.org>
Source record: 2347

Anyone know where I can get a CA-5484 (that's a manufacture part no.
not Realistic I think it says matsumi on the top of the can)osc coil
from a Realistic DX100 receiver it's 1.6-4.5 MHZ it looks like the old 6
transistor radio can transformer.

1145. Re: ADC-40 FI ? (KD1JV QRP)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-27 14:19:31 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <e39e9e1d-d2dc-4337-94dc-a1ef8ed17834@p9g2000vbl.googlegroups.com>
Source record: 2348

On Oct 26, 3:36 pm, "QRP'er" <nexiste...@free.fr> wrote:
> But it is amazing because the two FI have very different impedances :
> 42IF122 = 15K/0.3K
> 42IF123 = 25K/4K
> Which are rather distant from one another...

KD1JV is using them as readily available components that can be made to resonate on 40M.

That section is both a narrowband filter and a matching network; the topology around two coupled resonant LC's guarantees the narrowbandedness more than any individual component values. And mismatches can largely be accomodated by tweaking the cores. I'm sure there's some difference in core position depending on what part you use but as long as it peaks up in the 40M band you're good to go.

If you don't have those Mouser cores, don't worry, you can tear apart any FM radio from the past chunk of a century and find 10.7MHz transformers in it.

Tim.

1146. Re: Right-to-left schematics?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-27 16:25:27 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <55a53e56-ccd2-417b-85bd-986b15189fe6@k17g2000yqh.googlegroups.com>
Source record: 2349

On Oct 25, 9:41 am, sorry-spammers <""w9wi\"@(sorry-spammers)"> wrote:
> Paging through an old QST, it dawned on me that when schematics are drawn, usually the earliest stages are drawn on the left side of the diagram. The
> speech input circuits for a voice transmitter; the antenna coupling and RF preamp (if any) for a receiver, etc., all seem to be drawn on the left.
>
> In the tube days at least (and to some degree with solid-state homebrew today) we seem to build the actual equipment the same way: the earliest stages
> are physically on the left side of the gear.

Heck, when I lay out a PCB or do dead-bug construction, I start on the
left too :-).

> Of course, in Western culture we also read and write from left to right. I suppose we learn to look for the beginning of a story on the left side of
> the page.
>
> And of course, in some other cultures, people read and write from *right to left*.
>
> When people from these cultures become involved in radio, do they draw schematics (and build gear?) in the same direction Westerners do? Or do they
> work "backwards"?

In the 70's I was befuddled by a bunch of schematics from England that
I had to decode. I came to the conclusion that they were hard to read
because they drive on the wrong side of the road over there. But
really they were just using (by my standards) some odd symbols or odd
line thicknesses oddly placed. In my experience the choice of odd or
unconventional or even just different symbols is a far bigger barrier
to schematics between different cultures than any left-to-right bias.

Tim.

1147. Re: Right-to-left schematics?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-27 21:56:21 UTC
From: AndyS <andysharpe@juno.com>
Message-ID: <3f665798-61bd-418b-9000-7afb46be70f9@l13g2000yqb.googlegroups.com>
Source record: 2350

Andy comments:

If left to right is good enough for the Koran , the Talmud, and the Bible.....

.... it's good enough for my schematics.....

Who are we to go against God's chosen order ?

Andy in Eureka, Texas ..... with tongue in cheek.... :>))))

1148. FS: NEW Minicircuits ZKL-1R5 RF MICROWAVE AMPLIFIER(s) 10MHz-1.5GHz. $38.70 or $50 on Ebay [LOT of TEN, ZKL1R5]

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-28 20:48:59 UTC
From: Mark Licetti <StanStar@nyc.rr.com>
Message-ID: <0c9b2d26-cc45-44ab-899d-4c1ed885be22@x6g2000prc.googlegroups.com>
Source record: 2251
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

LOT of TEN or Singles.
Minicircuits ZKL-1R5 [ZKL1R5] RF MICROWAVE AMPLIFIER(s), Wideband 10MHz-1.5GHz.
High-end Amps, MedPower +18.7dBm, LowNoise 3dB, Gain 39-40dB. NEW - in original Minicircuits/antistatic packaging (never used, USA origin & location, ships worldwide).
Either Singles or entire LOT (price shown for a Lot, but message us if you want single(s) - shipping is CHEAPER than shown ($5.20), etc. however on a quantity basis you save by dealing as a Lot, not Singles - message us if you just need a few, not all 10 units).

Posted on Ebay, item# 330371507322 - goto www.ebay.com & enter 330371507322 into search. "BuyNow" OPTION is AVAILABLE - NO need to wait for Auction ending.
Contact via Ebay (best) or Email. By Email, can hit "Reply" in Newsgroups but REMOVE "nospam" strings if appears in my address (edit address manually, but sometimes it’s already done) so I could respond from a real address/name. Do NOT reply on Newsgroups (I posted here, but will NOT read), and if I get much spam that address will be DISABLED, so you'll have to communicate via Ebay (which, incidentally, is more secure anyway). My Ebay feedback is 100% positive, not to mention 14 YEARS of Newsgroups trading without complains. Again, description is on Ebay but a few facts are copied here (for convenience):

** TECHNICAL SPECS:
A DATASHEET PDF is at manufacturer's site www.minicircuits.com-->enter "ZKL-1R5" into search--> datasheet (do not omit dash, ZKL1R5 instead of ZKL-1R5 will result in an error); so only a few specs are copied below. Finally, check the price Minicircuits is asking - $150/unit, we're asking $39 "auction start" & $56 "buynow" options - new/sealed units but @33% cost (reason to sell is explained below)
** PHOTOS are at EXTERNAL SERVER (as I CANNOT POST on EBAY for free beyond 1st free photo); at http://photos.starium.org ----> select Gallery named "Minicircuits ZKL-1R5"..
• Wideband, 10MHz to 1.500 GHz
• IP3 +31 dBm typ.
• LowNoise 3 dB typ. (not bad for a MedPower amp, rather than dedicated LNA)
• Gain 40 dB typ., Flatness 1.2dB
• VSWR IN 1.4, OUT 1.6
• P1dB Compression Point +15dB min, however charts indicate 17.6 to 18.7dBm

• Connectors - SMA (50 Ohm impedance), gold-plated.
• DCpower +12V nom @115mA max, but will take a range of 9-13V or wider.
• More data, plots, etc. are in a datasheet (PDF) downloadable from manufacturer's website.
Example of applications: communication systems e.g. cellular, satellite distribution, GSM/ISM; Radars, we're using them in a Middle-Stage Amplifier block in an MRI (magnetic) scientific instrument.

** REASON to SELL::
Our RF Engineer has changed Product design in which this amplifier was previously used (a scientific instrument); so not all purchased lots of ZKL-1R5 could be finished before new design "kicked in". In the new design, ZKL1R5 overloads the newly designed next amplifying stage (which became more sensitive) & we don't know a clean way to attenuate ZKL1R5's gain (38-40dB!, lowering powersupply is not a solution & not enough). So instead we switched to using ZFL-500 amps with lower gain & narrower bandwidth (0.5Ghz, in fact all we need is 0.2GHz, not even 0.5GHz). Minicircuit's policy is not to take them back & it's laborious to try to retrofit these into a new system - it's better if we simply sell, at a loss or not, but it's easier. We're already stocked on 60 ZFL-500's, so design change is permanent/verified.

I, in fact, come from a competing RF company (not to be mentioned) so not interested in promoting Minicircuits, but this is one of Minicircuits better models; as far as I know it's using Gallium/Indium PHEMT/etc. FET’s or something to that effect, not surprising but $150 price is already difficult to attain, yet we ask even 3-4x times less or to exchange for ZFL500 (Minicircuits said ‘no”). It's a pity at the new company where I moved in 2008, which is using RF Amps (not designing them), we cannot use ZKL1R5 due to gain excessive for a new design (was normal in an older design), also we decided don't need 1.5GHz expensive amps considering our signals are under 200MHz.

P.S. Again, more photos are at that http://photos.starium.org site - pictures are better than a lengthy verbal description.

1149. Re: EMI prevention / protection?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-30 17:40:47 UTC
From: "dave.harper" <dave.harper@gmail.com>
Message-ID: <9de2939d-556d-4d5a-a541-e3e0bb32d400@f16g2000yqm.googlegroups.com>
Source record: 2252
Cross-posted to: sci.electronics.design,sci.electronics.basics,rec.radio.amateur.misc,rec.radio.amateur.homebrew

I'm using the wein bridge to generate audio tones that are fed to the transmitter for digital radio communication (basically a homebrew ASK radio modem). I'd be open to using that, but I'm not aware of any radio modems that output square waves.

This oscillator also has 2 digital pots attached: 1 to trim the space tone, and 1 to trim the mark tone. There's a high speed switch between the two pots to rapidly switch between mark and space tones. I could use this same setup with a 555 and trim the resistor to vary the pulse duration, but I'm not sure what impact a square wave would have on transmission, reception, decoding, etc...?

Has anyone heard of a square wave being used as an audio tone for digital radio communication?

Thanks in advance,
Dave

On Oct 30, 12:06 pm, George Herold <ggher...@gmail.com> wrote:
> Hmm I have no idea if that will make any difference. What are you
> using to control the feedback? Can you use a more robust oscillator
> (as John suggested) Some type of 'bang-bang' rather than sitting on
> the 'knife-edge' of oscillation with the Wein bridge. I needed the
> low harmonic distortion of the Wein bridge... Is that what you need?
>
> George H.

1150. Re: EMI prevention / protection?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-30 18:21:16 UTC
From: George Herold <ggherold@gmail.com>
Message-ID: <277f558b-97cd-4c05-9974-7e8b389f615f@k17g2000yqb.googlegroups.com>
Source record: 2253
Cross-posted to: sci.electronics.design,sci.electronics.basics,rec.radio.amateur.misc,rec.radio.amateur.homebrew

On Oct 30, 1:40 pm, "dave.harper" <dave.har...@gmail.com> wrote:
> I'm using the wein bridge to generate audio tones that are fed to the
> transmitter for digital radio communication (basically a homebrew ASK
> radio modem). I'd be open to using that, but I'm not aware of any
> radio modems that output square waves.
>
> This oscillator also has 2 digital pots attached: 1 to trim the space
> tone, and 1 to trim the mark tone. There's a high speed switch
> between the two pots to rapidly switch between mark and space tones.
> I could use this same setup with a 555 and trim the resistor to vary
> the pulse duration, but I'm not sure what impact a square wave would
> have on transmission, reception, decoding, etc...?
>
> Has anyone heard of a square wave being used as an audio tone for
> digital radio communication?
>
> Thanks in advance,
> Dave
>
> On Oct 30, 12:06 pm, George Herold <ggher...@gmail.com> wrote:
>
>
>
> > Hmm I have no idea if that will make any difference. What are you
> > using to control the feedback? Can you use a more robust oscillator
> > (as John suggested) Some type of 'bang-bang' rather than sitting on
> > the 'knife-edge' of oscillation with the Wein bridge. I needed the
> > low harmonic distortion of the Wein bridge... Is that what you need?
>
> > George H.- Hide quoted text -
>
> - Show quoted text -

Hi Dave, I know nothing about ASK radio modem.
I think you can get a triangle wave out of a 555 (Or some other charge/
discharge osc.) You can then low pass filter the triangle to get rid
of the sharp peaks.. There are also some trianlge wave to sine wave
converter circuits that use diodes or transistors to 'smooth' the
tiangle wave. If you don't care too much about harmonic content then
either approach may work.

George H.

1151. Re: Need data sheet for 811 tube

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-31 19:03:27 UTC
From: teh kosher ham <kb9@puncegotcha.com>
Message-ID: <4aec8a01$1@x-privat.org>
Source record: 2254
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy

"kb9rqz" <kb9rqz@puncegotcha.com> wrote in message
news:4a847839$1@x-privat.org...
>
> "Tim Shoppa" <shoppa@trailing-edge.com> wrote in message
> news:d2924bc9-f9dd-4d6c-bda7-b3a03c3303a9@e4g2000vbe.googlegroups.com...
> On Aug 9, 1:07 pm, Kenneth Scharf <wa2...@bellsouth.net> wrote:
>> Does anybody have a link to a scan of an old data sheet for the 811 (NOT
>> 811A) tube? All I seem to find are 811A spec's. I have the two line
>> blub on the older 811 in an old ARRL HB, but I'd like to get the
>> complete spec sheet. This tube existed in the gap between the TT3 and
>> TT4 tube manuals so I can't find it.
>
> I don't know where to find the datasheet for the 811-non-A, but I did
> want to step in and point out that TT3 has the BEST SHEMALE TUBE PORN
> EVER!.
> That picture of the 833 gets me all excited, even today.
>
> Mrak i punce mrogan
> http://ipunce.blogspot.com/
>
>
>
your blog is toast

1152. Re: new gruop four U

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-31 19:09:35 UTC
From: teh kosher ham <kb9@puncegotcha.com>
Message-ID: <4aec8b71@x-privat.org>
Source record: 2255
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.shortwave

"kb9rqz" <kb9rqz@puncegotcha.com> wrote in message
news:4ab675ef@x-privat.org...
>I has indeed craeted a miror policy gruop where the non-ameateur related
>post will indeed be deleted.
> For tohse who may has an interest indeed Feel free to visit/subcribe/use
> teh site.
>
> http://groups.google.com/group/rec-radio-amateur-radio?hl=en
>
> I punce a moronatated blog from teh ham radio that happenens to indeed be
> Bi sexaul kinky
> http://kb9rqz.blogspot.com/
>
>
> show-na-two-va (pohnetically speeled)
>
>
anywon ever tell U you say indeed to much?

1153. get kelp

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-31 19:13:48 UTC
From: kb9rqz <mark@kb9rqz.com>
Message-ID: <b539d14a-fbe4-4eb4-8487-828b9888b62d@j24g2000yqa.googlegroups.com>
Source record: 2256
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Oct 31, 3:03 pm, "teh kosher ham" <k...@puncegotcha.com> wrote:
> "kb9rqz" <kb9...@puncegotcha.com> wrote in message
>
> news:4a847839$1@x-privat.org...
>
>
>
>
>
> > "Tim Shoppa" <sho...@trailing-edge.com> wrote in message
> >news:d2924bc9-f9dd-4d6c-bda7-b3a03c3303a9@e4g2000vbe.googlegroups.com...
> > On Aug 9, 1:07 pm, Kenneth Scharf <wa2...@bellsouth.net> wrote:
> >> Does anybody have a link to a scan of an old data sheet for the 811 (NOT
> >> 811A) tube? All I seem to find are 811A spec's. I have the two line
> >> blub on the older 811 in an old ARRL HB, but I'd like to get the
> >> complete spec sheet. This tube existed in the gap between the TT3 and
> >> TT4 tube manuals so I can't find it.
>
> > I don't know where to find the datasheet for the 811-non-A, but I did
> > want to step in and point out that TT3 has the BEST SHEMALE TUBE PORN
> > EVER!.
> > That picture of the 833 gets me all excited, even today.
>
> > Mrak i punce mrogan
> >http://ipune.blogspot.com/
>
> your blog is toast- Hide quoted text -
>
> - Show quoted text -

1154. Re: shonatovah

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-31 19:14:04 UTC
From: kb9rqz <mark@kb9rqz.com>
Message-ID: <4ab0560f-5dc8-4e04-9153-3b7fe7792df4@n35g2000yqm.googlegroups.com>
Source record: 2257
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.shortwave

On Sep 20, 7:00 pm, kb9rqz <m...@kb9rqz.com> wrote:
> On Sep 20, 2:35 pm, "kb9rqz" <kb9...@puncegotcha.com> wrote:> I
>
> fake

1155. Re: EMI prevention / protection?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-10-31 20:53:04 UTC
From: raypsi <rborowiak@gmail.com>
Message-ID: <c09399d6-d7ef-4f87-94c8-1f14d81018c0@p35g2000yqh.googlegroups.com>
Source record: 2258
Cross-posted to: sci.electronics.design,sci.electronics.basics,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Hey OM:

ASK is CW pure and simple. What you have is infinitely variable speed
CW. And some times the speed varies so much you can't tell if it's a
dit or a dah.

You can't beat CW, no way, no how, for the best source, of signal, in
an EMI environment.
Towit you can't beat ASK either.

Just keep on doing what you are doing.

As for square wave for audio, we are looking at an infinite number of
harmonics in a square wave, and that may be a good thing, but is it
what you want?

73 OM
de n8zu

On Oct 30, 12:40 pm, "dave.harper" <dave.har...@gmail.com> wrote:
> I'm using the wein bridge to generate audio tones that are fed to the
> transmitter for digital radio communication (basically a homebrew ASK
> radio modem). I'd be open to using that, but I'm not aware of any
> radio modems that output square waves.
>
> This oscillator also has 2 digital pots attached: 1 to trim the space
> tone, and 1 to trim the mark tone. There's a high speed switch
> between the two pots to rapidly switch between mark and space tones.
> I could use this same setup with a 555 and trim the resistor to vary
> the pulse duration, but I'm not sure what impact a square wave would
> have on transmission, reception, decoding, etc...?
>
> Has anyone heard of a square wave being used as an audio tone for
> digital radio communication?
>
> Thanks in advance,
> Dave
>
> On Oct 30, 12:06 pm, George Herold <ggher...@gmail.com> wrote:
>
> > Hmm I have no idea if that will make any difference. What are you
> > using to control the feedback? Can you use a more robust oscillator
> > (as John suggested) Some type of 'bang-bang' rather than sitting on
> > the 'knife-edge' of oscillation with the Wein bridge. I needed the
> > low harmonic distortion of the Wein bridge... Is that what you need?

>
> > George H.

1156. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-01 07:00:03 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1257058800@panix.com>
Source record: 2259
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

1157. Re: EMI prevention / protection?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-01 16:42:41 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <f97ae738-4e01-444a-b3f4-a12a5635c9a1@y32g2000prd.googlegroups.com>
Source record: 2260
Cross-posted to: sci.electronics.design,sci.electronics.basics,rec.radio.amateur.misc,rec.radio.amateur.homebrew

On Oct 30, 9:40 am, "dave.harper" <dave.har...@gmail.com> wrote:
> I'm using the wein bridge to generate audio tones that are fed to the
> transmitter for digital radio communication (basically a homebrew ASK
> radio modem). I'd be open to using that, but I'm not aware of any
> radio modems that output square waves.
>
> This oscillator also has 2 digital pots attached: 1 to trim the space
> tone, and 1 to trim the mark tone. There's a high speed switch
> between the two pots to rapidly switch between mark and space tones.
> I could use this same setup with a 555 and trim the resistor to vary
> the pulse duration, but I'm not sure what impact a square wave would
> have on transmission, reception, decoding, etc...?
>
> Has anyone heard of a square wave being used as an audio tone for
> digital radio communication?

I think you mean "AFSK". At least that's what I think you mean. ASK =
Amplitude Shift Keying.

Something in the transmitter chain stops (or should stop!) the square
wave from being square with all the odd harmonics going out to
infinity.

This something may be in the audio stage (example: low pass audio
filter), or the IF stage (example: bandpass filter), or in the RF
stage (example: tuned circuits).

It is very doubtful that after going through the transmitter and
receiver that it'll come out as a square wave on the other end.
Choosing to transmit a square wave audio waveform is usually a poor
choice because you know that it can't come out looking that pretty on
the other end. This sort of design decision might be made for a very
low-end radio control transmitter of the 60's or 70's out of
ignorance, but today we know how to do far better with little extra
effort.

Most designs make a conscious choice to be a friendly transmitter, and
limit splatter and unnecessary bandwidth that would be in violation of
the FCC rules, by running any square wave through a low pass audio
filter AND additionally using a rational choice for the IF filtering
too. Way better than nothing, is a simple RC low pass in the audio
stage. Still to be nice the resulting audio level has to be carefully
set to not cause splatter in subsequent stages.

Tim N3QE

1158. Re: EMI prevention / protection?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-03 03:58:44 UTC
From: raypsi <rborowiak@gmail.com>
Message-ID: <8c5513ce-8dd2-470e-aa7a-7332a5655be9@d10g2000yqh.googlegroups.com>
Source record: 2261
Cross-posted to: sci.electronics.design,sci.electronics.basics,rec.radio.amateur.misc,rec.radio.amateur.homebrew

On Nov 1, 11:42 am, Tim Shoppa <sho...@trailing-edge.com> wrote:
> On Oct 30, 9:40 am, "dave.harper" <dave.har...@gmail.com> wrote:
>
> > I'm using the wein bridge to generate audio tones that are fed to the
> > transmitter for digital radio communication (basically a homebrew ASK
> > radio modem). I'd be open to using that, but I'm not aware of any
> > radio modems that output square waves.
>
> > This oscillator also has 2 digital pots attached: 1 to trim the space
> > tone, and 1 to trim the mark tone. There's a high speed switch
> > between the two pots to rapidly switch between mark and space tones.
> > I could use this same setup with a 555 and trim the resistor to vary
> > the pulse duration, but I'm not sure what impact a square wave would
> > have on transmission, reception, decoding, etc...?
>
> > Has anyone heard of a square wave being used as an audio tone for
> > digital radio communication?
>
> I think you mean "AFSK". At least that's what I think you mean. ASK =
> Amplitude Shift Keying.
>
> Something in the transmitter chain stops (or should stop!) the square
> wave from being square with all the odd harmonics going out to
> infinity.
>
> This something may be in the audio stage (example: low pass audio
> filter), or the IF stage (example: bandpass filter), or in the RF
> stage (example: tuned circuits).
>
> It is very doubtful that after going through the transmitter and
> receiver that it'll come out as a square wave on the other end.
> Choosing to transmit a square wave audio waveform is usually a poor
> choice because you know that it can't come out looking that pretty on
> the other end. This sort of design decision might be made for a very
> low-end radio control transmitter of the 60's or 70's out of
> ignorance, but today we know how to do far better with little extra
> effort.
>
> Most designs make a conscious choice to be a friendly transmitter, and
> limit splatter and unnecessary bandwidth that would be in violation of
> the FCC rules, by running any square wave through a low pass audio
> filter AND additionally using a rational choice for the IF filtering
> too. Way better than nothing, is a simple RC low pass in the audio

> stage. Still to be nice the resulting audio level has to be carefully
> set to not cause splatter in subsequent stages.
>

Hey OM

I looked at this guys profile.

I would say he's into telemetry.

If you want to stay away from EMI take it to the 2.4Ghz band.

I don't think he's a ham..

I think he cross forumed this post.

My best guess is he is running into trouble on the VHF/UHF spectrum
where there is tonnes o EMI. QRN and QRM.

73 OM
de n8zu

1159. Re: new gruop four U

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-03 13:18:21 UTC
From: UberJacker <nohijack@houston-hunks.com>
Message-ID: <640b6b82-fdae-4aa6-a2d3-1f3d424fc44b@g23g2000yqh.googlegroups.com>
Source record: 2262
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.shortwave

On Oct 31, 1:09 pm, "teh kosher ham" <k...@puncegotcha.com> wrote:
> "kb9rqz" <kb9...@puncegotcha.com> wrote in message
>
> news:4ab675ef@x-privat.org...>I has indeed craeted a miror policy gruop where the
non-ameateur related
> >post will indeed be deleted.
> > For tohse who may has an interest indeed Feel free to visit/subcribe/use
> > teh site.
>
> >http://groups.google.com/group/rec-radio-amateur-radio?hl=en
>
> > I punce a moronatated blog from teh ham radio that happenens to indeed be
> > Bi sexaul kinky
> >http://kb9rqz.blogspot.com/
>
> > show-na-two-va (pohnetically speeled)
>
> anywon ever tell U you say indeed to much?

"I realy don't write that badly I do write in ore
european mode [sic]" -- Mark Morgan in message
<cc2j13hrksgg1aat0kpa8ga1scm8hohn96@4ax.com>

1160. Re: shonatovah

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-03 14:56:15 UTC
From: kb9rqz <mark@kb9rqz.com>
Message-ID: <4f987605-c9e4-4a31-850a-8bc3a0af0c88@p23g2000vbl.googlegroups.com>
Source record: 2263
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.shortwave

On Oct 31, 2:14 pm, kb9rqz <m...@kb9rqz.com> wrote:
> On Sep 20, 7:00 pm, kb9rqz <m...@kb9rqz.com> wrote:
>
>
>
> > On Sep 20, 2:35 pm, "kb9rqz" <kb9...@puncegotcha.com> wrote:> I
>
> > fake- Hide quoted text -
>
> - Show quoted text -

1161. www.sm0vpo.com (at long last)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-03 15:53:12 UTC
From: Kenry Hissinger <kenry.hissinger@hotmail.com>
Message-ID: <IlYHm.12601$U5.186142@newsb.telia.net>
Source record: 2264

Hi all,
I was given a fantastic birthday present, my own domain :-)

So if you had trouble trying to remember http://web.telia.com/~u85920178/
then fear not for www.sm0vpo.com is the new URL.

Bery best regards from Harry - SM0VPO

1162. Re: www.sm0vpo.com (at long last)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-03 21:49:26 UTC
From: John W <jrw>
Message-ID: <yr2dnbni5aL3OG3XnZ2dnUVZ8v2dnZ2d@brightview.co.uk>
Source record: 2265

Congratulations Harry, your homebrew pages are great..

73
JOHN M5AML

---

www.wells10000.plus.com/m5aml

1163. Re: www.sm0vpo.com (at long last)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-03 23:24:47 UTC
From: Coulombus <coulombus@uk.radio.amateur>
Message-ID: <8Z2Im.67442$op2.54339@newsfe28.ams2>
Source record: 2266

"John W" <jrw[no-spam-today-thank-you]@gmx.co.uk> wrote in message
news:yr2dnbni5aL3OG3XnZ2dnUVZ8v2dnZ2d@brightview.co.uk...
> Congratulations Harry, your homebrew pages are great..

Yes, they certainly do grate! :-)

1164. Re: www.sm0vpo.com (at long last)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-04 00:29:06 UTC
From: Bill M <radioexray@geeeemail.com>
Message-ID: <hcqhp2172a@news7.newsguy.com>
Source record: 2267

Kenry Hissinger wrote:
> Hi all,
> I was given a fantastic birthday present, my own domain :-)
>
> So if you had trouble trying to remember http://web.telia.com/~u85920178/
> then fear not for www.sm0vpo.com is the new URL.
>
> Bery best regards from Harry - SM0VPO

I often visit your site. Its good to have a URL that I can remember!

-Bill

1165. Seeking New FAQ/Intro Maintainers for rec.radio.amateur.*

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-07 07:05:00 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/recruitment-1-1257577500@panix.com>
Source record: 2268
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/recruitment
Revision: 1.1 2007/09/29 18:42:47
Posting-Frequency: posted monthly
URL: http://www.faqs.org/faqs/radio/personal-intro/

Changes followed by "|".

The rec.radio.info newsgroup, first established in 1993, has been
recently revived by an active moderation team. We are currently seeking
suitable information, FAQ, and bulletin articles from the entire
rec.radio.* newsgroup hierarchy for simultaneous cross-posting to our
newsgroup.

We are seeking a replacement maintainer for the following information
bulletin formerly posted to rec.radio.amateur.* (and currently archived
at http://www.faqs.org/faqs/radio/personal-intro/ ):

radio/personal-intro
Subject: Guide to the rec.radio Newsgroups
Maintainer: jeffreyh@Hawaii.Edu (Jeffrey Herman)
Last Posted: 9 Nov 2001 06:18:17 GMT
Posting-Frequency: 15th of each month

We are willing to provide any technical support necessary to get this
article updated and automatically posted again at a regular interval.
This would include establishing contact with the original maintainer for
any necessary permissions. We would prefer to seek a new, dedicated
maintainer at this time, rather than start auto-posting the original
article ourselves.

For more information about our newsgroup, see:

http://www.panix.com/~rram/usenet/rri/index.html

Please direct any comments, questions, or criticisms to
rec-radio-info-request@panix.com.
```

1166. Re: home brew toroid winding machine

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-07 14:40:08 UTC
From: Jonatan <try@this.com>
Message-ID: <4af5a735$0$6546$6d4158fb@reader.xsnews.nl>
Source record: 2269

Since when are jpg's 2.18 Mb ? Not nice for dailin connections..

1167. About exciting passive circuits and magnetrons.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-07 14:47:00 UTC
From: Jonatan <try@this.com>
Message-ID: <4af5fe5e$0$784$6d4158fb@reader.xsnews.nl>
Source record: 2270

You maybe knowing your microwave's inner workings.
It uses a microwave valve which consists of LC chambers of 2.4 GHz.
And they are excited with a dc hv of must be 50 Hz.

Now we have two possibilities, the output is in trains or constant rf output.

Who of the hams here can messure that output ?

1168. Re: About exciting passive circuits and magnetrons.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-07 18:46:41 UTC
From: brian whatcott <betwys1@sbcglobal.net>
Message-ID: <Cq2dnQawGNuSXGjXnZ2dnUVZ_qRi4p2d@giganews.com>
Source record: 2271

Jonatan wrote:
>
> You maybe knowing your microwave's inner workings.
> It uses a microwave valve which consists of LC chambers of 2.4 GHz.
> And they are excited with a dc hv of must be 50 Hz.
>
> Now we have two possibilities, the output is in trains or constant rf
> output.
>
> Who of the hams here can messure that output ?
>
The transformer has a core bypass to handle the reactive load. There is
a power rectifier and a capacitor to (somewhat) smooth the 1KV output.
Still, magnetrons are sensitive to the cathode volts they see, so the
output varies somewhat in frequency and amplitude at line frequency.

Brian W

1169. Pasokon Interface

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-07 19:02:45 UTC
From: Howard James <howardwj@ntlworld.com>
Message-ID: <FvjJm.9142$s_4.5809@newsfe02.ams2>
Source record: 2272

Does anyone have the schematic of the Pasokon SSTV interface board please?
Mine (interface) has developed a fault and I want to fix it.
Thanks. Howard.

1170. Re: About exciting passive circuits and magnetrons.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-08 09:56:14 UTC
From: Jonatan <try@this.com>
Message-ID: <4af70eca$0$1304$6d4158fb@reader.xsnews.nl>
Source record: 2273

"Jonatan" wrote:

> You maybe knowing your microwave's inner workings.
> It uses a microwave valve which consists of LC chambers of 2.4 GHz.
> And they are excited with a dc hv of must be 50 Hz.
>
> Now we have two possibilities, the output is in trains or constant rf output.
>
> Who of the hams here can messure that output ?

So like a Teslacoil one is able to generate 2.4 GHz with strikes of only 50 Hz ?
How can the rf waves prolong so long ? A few cycles of 2.4 GHz o.k. but
it looks like almost a continues wave.
You try that on sw or mw. It should work even better there.

1171. Re: About exciting passive circuits and magnetrons.

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-08 20:20:00 UTC
From: Natanoj <natanoj@uk.radio.amateur>
Message-ID: <TJFJm.61702$cj4.3436@newsfe14.ams2>
Source record: 2274

"Jonatan" <try@this.com> wrote in message
news:4af5fe5e$0$784$6d4158fb@reader.xsnews.nl...
>
> You maybe knowing your microwave's inner workings.
> It uses a microwave valve which consists of LC chambers of 2.4 GHz.
> And they are excited with a dc hv of must be 50 Hz.
>
> Now we have two possibilities, the output is in trains or constant rf
> output.
> Who of the hams here can messure that output ?

The messure of output in trains rf output with a dc hv of must be 50 Hz into
LC chambers of 2.4 GHz .
Then you maybe knowing your microwave's inner workings and cooking of your
hams may possible!

1172. Natanoj/Jonatan writ...(was About exciting passive ...)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-10 01:53:28 UTC
From: brian whatcott <betwys1@sbcglobal.net>
Message-ID: <QqydnclqP89DWmXXnZ2dnUVZ_jCdnZ2d@giganews.com>
Source record: 2276

> Natanoj aka "Jonatan" [get it?] wrote some stuff....
>> /snip/

Say, young fellah: does your Mommy know you're
playing on her 'puter?

Brian W

1173. Re: Pasokon Interface

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-10 02:52:53 UTC
From: Kenneth Scharf <wa2mze@bellsouth.net>
Message-ID: <hdagp9$1lh$1@news.eternal-september.org>
Source record: 2275

Howard James wrote:
> Does anyone have the schematic of the Pasokon SSTV interface board please?
> Mine (interface) has developed a fault and I want to fix it.
> Thanks. Howard.
>
>
http://www.arrl.org/members-only/qqnsearch.html?search=1&words=sstv&name=&call=&year=1993&month=1&selpub[]=QST

It's in the Jan 1993 issue of QST. If you are an ARRL member you can
read it on line.

1174. Re: Natanoj/Jonatan writ...(was About exciting passive ...)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-11 12:04:06 UTC
From: raypsi <rborowiak@gmail.com>
Message-ID: <8dc76b8d-f904-4d27-a0a0-def4d2de3353@m16g2000yqc.googlegroups.com>
Source record: 2277

On Nov 9, 8:53 pm, brian whatcott <betw...@sbcglobal.net> wrote:
> > Natanoj aka "Jonatan" [get it?] wrote some stuff....
> >> /snip/
>
> Say, young fellah: does your Mommy know you're
> playing on her 'puter?
>
> Brian W

Hey OM:

Every time I looky his profile it changes, Gotta love those script
kinders.

My hams are honey baked spiral sliced. Hard to do with microwaves.

73 OM
de n8zu

1175. Re: Toronto Brewers want Peated Malt?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-12 15:23:24 UTC
From: Highlandham <highlandham_nospam@rfburns.com>
Message-ID: <cs-dnQjTTZTxtWHXnZ2dnUVZ8hhi4p2d@pipex.net>
Source record: 2278

BeeRich wrote:
> Hi folks.
>
> Any Toronto all-grain brewers want peated malt? I'm not brewing these
> days, but I can whip up some peated malt for those that could use some
> in a test brew. I used some at my professional brewery some time
> back, but since it was shipped from the UK and moved around somewhat,
> it didn't impart too much flavour.
>
> In any case, let me know if you are interested.
>
> Cheers
==========
Amateur Radio jargon is clearly not understood by all
Action : to be educated

Frank GM0CSZ / KN6WH

1176. Re: Toronto Brewers want Peated Malt?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-12 16:07:39 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <MfSdnYhoz4pWr2HXnZ2dnUVZ_oBi4p2d@web-ster.com>
Source record: 2279

On Thu, 12 Nov 2009 06:52:37 -0800, BeeRich wrote:

> Hi folks.
>
> Any Toronto all-grain brewers want peated malt? I'm not brewing these
> days, but I can whip up some peated malt for those that could use some
> in a test brew. I used some at my professional brewery some time back,
> but since it was shipped from the UK and moved around somewhat, it
> didn't impart too much flavour.
>
> In any case, let me know if you are interested.

In amateur radio parlance, "homebrew" means "to make one's own
equipment". It's a metaphor that _refers_ to the act of brewing one's
own beer -- it doesn't literally mean amateur radio operators who also
brew beer.

(Although I'll bet that radio amateurs who build their own equipment are
also more likely to brew their own beer).

--
www.wescottdesign.com

1177. Re: Toronto Brewers want Peated Malt?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-13 20:35:19 UTC
From: BeeRich <beerich@gmail.com>
Message-ID: <e4ad89f6-75fd-4264-99f0-fbbabb8c0355@f20g2000vbl.googlegroups.com>
Source record: 2280

On Nov 12, 11:07 am, Tim Wescott <t...@seemywebsite.com> wrote:
> On Thu, 12 Nov 2009 06:52:37 -0800, BeeRich wrote:
> > Hi folks.

> In amateur radio parlance, "homebrew" means "to make one's own
> equipment". It's a metaphor that _refers_ to the act of brewing one's
> own beer -- it doesn't literally mean amateur radio operators who also
> brew beer.
>
> (Although I'll bet that radio amateurs who build their own equipment are
> also more likely to brew their own beer).
>
> --www.wescottdesign.com

Sorry I thought I took this message out. I built my own ham equipment
back in the day. In fact I'm selling some 6M equipment if anybody is
interested. But ya, I thought I deleted this email. Wasn't paying
attention to the group name. Sorry about that.

1178. Re: Natanoj/Jonatan writ...(was About exciting passive ...)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-15 22:22:43 UTC
From: "...---..." <...---...@uk.radio.amateur>
Message-ID: <Xa%Lm.14964$eE7.1013@newsfe17.ams2>
Source record: 2281

"raypsi" <rborowiak@gmail.com> wrote in message
news:8dc76b8d-f904-4d27-a0a0-def4d2de3353@m16g2000yqc.googlegroups.com...
On Nov 9, 8:53 pm, brian whatcott <betw...@sbcglobal.net> wrote:
> > Natanoj aka "Jonatan" [get it?] wrote some stuff....
> >> /snip/
>
> Say, young fellah: does your Mommy know you're
> playing on her 'puter?
>
> Brian W

Hey OM:

Every time I looky his profile it changes, Gotta love those script
kinders.

My hams are honey baked spiral sliced.

Bet your nuts are too!

1179. Re: ADC-40 FI ? (KD1JV QRP)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-19 01:26:56 UTC
From: Kenneth Scharf <wa2mze@bellsouth.net>
Message-ID: <he233flqj1@news.eternal-september.org>
Source record: 2282

Tim Shoppa wrote:
> On Oct 26, 3:36 pm, "QRP'er" <nexiste...@free.fr> wrote:
>> But it is amazing because the two FI have very different impedances :
>> 42IF122 = 15K/0.3K
>> 42IF123 = 25K/4K
>> Which are rather distant from one another...
>
> KD1JV is using them as readily available components that can be made
> to resonate on 40M.
>
> That section is both a narrowband filter and a matching network; the
> topology around two coupled resonant LC's guarantees the
> narrowbandedness more than any individual component values. And
> mismatches can largely be accomodated by tweaking the cores. I'm sure
> there's some difference in core position depending on what part you
> use but as long as it peaks up in the 40M band you're good to go.
>
> If you don't have those Mouser cores, don't worry, you can tear apart
> any FM radio from the past chunk of a century and find 10.7MHz
> transformers in it.
>
> Tim
For that matter you can also get a T-37-6 or T-50-6 toroid and make your
own transformer. You'll have to use a trimmer cap to tune it since
toroids don't have tuning slugs but the end result won't be much bigger.
www.kitsandparts.com has toroids cheaper than anybody else and they have
all the winding data on their site.

1180. Re: Right-to-left schematics?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-20 15:54:49 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnhgdeum.3ls.bit-bucket@shell.config.com>
Source record: 2283

On Tue, 27 Oct 2009 09:25:27 -0700 (PDT), Tim Shoppa wrote:
> On Oct 25, 9:41ï¿½am, sorry-spammers <""w9wi\"@(sorry-spammers)"> wrote:
>> Paging through an old QST, it dawned on me that when schematics are drawn, usually the earliest stages are drawn on the left side of the diagram. ï¿½The
>> speech input circuits for a voice transmitter; the antenna coupling and RF preamp (if any) for a receiver, etc., all seem to be drawn on the left.
>>
>> In the tube days at least (and to some degree with solid-state homebrew today) we seem to build the actual equipment the same way: the earliest stages
>> are physically on the left side of the gear.
>
> In the 70's I was befuddled by a bunch of schematics from England that
> I had to decode. I came to the conclusion that they were hard to read
> because they drive on the wrong side of the road over there. But
> really they were just using (by my standards) some odd symbols or odd
> line thicknesses oddly placed. In my experience the choice of odd or
> unconventional or even just different symbols is a far bigger barrier
> to schematics between different cultures than any left-to-right bias.

Many old TRF schematics went left-to-right and then right-to-left.
This was done, I believe, to make it all fit on a 'standard' sized sheet
of paper. The antenna input was in the upper left -- with the RF
sections runing on towards the right. Just before, or just after, the
diode detection, the signal path would drop down the righthand side of
the schematic and then audio section(s) would run left-to-right.

Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
38.24N 104.55W | @ config.com | Jonesy | OS/2
* Killfiling google & XXXXbanter.com: jonz.net/ng.htm

1181. Puff 2.1

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-21 20:27:35 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <qMmdneawEMKq0JXWnZ2dnUVZ_jSdnZ2d@giganews.com>
Source record: 2284
Cross-posted to: alt.ham-radio.uwave,rec.radio.amateur.homebrew

Does anybody have a copy of the manual for Puff 2.1? Also is the source code available anywhere for download? I have a copy of the program for a DOS version, seems to work with DosBox in Linux, however if I can get the source code there is a way to recompile it to run natively under Linux.

73's

Leland C. Scott
KC8LDO

1182. Re: Right-to-left schematics?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-21 23:09:25 UTC
From: ray13 <ray_psi@yahoo.com>
Message-ID: <f319418c-5ea1-4c3d-83a7-99a1d9553706@x31g2000yqx.googlegroups.com>
Source record: 2285

Hey Old Timer:

Yeah and in China they read from bottom to top, so the grounds would
be at the top of the page and pointing up not down, and your B pluses
would be where our ground would be.

I have one word: ISO, says it all.
and IEEE would be another word.

Homebrew is thje battle ground for all those idea's.

We're the young generation and we got sum thing to say.

73 Old Timer,

de n8zu

> Of course, in Western culture we also read and write from left to right. I suppose we
learn to look for the beginning of a story on the left side of
> the page.
>
> And of course, in some other cultures, people read and write from *right to left*.
>
> When people from these cultures become involved in radio, do they draw schematics (and
build gear?) in the same direction Westerners do? Or do they
> work "backwards"?
>
> --
>
> Doug Smith W9WI
> Pleasant View, TN EM66

1183. Re: Right-to-left schematics?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-22 03:47:31 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <eeae3c6c-4f00-4c01-a9af-e83cbb7b5d92@2g2000prl.googlegroups.com>
Source record: 2286

On Oct 25, 5:41 am, sorry-spammers <""w9wi\"@(sorry-spammers)"> wrote:
> Yep, this is an off-the-wall question.....
>
> Paging through an old QST, it dawned on me that when schematics are drawn, usually the earliest stages are drawn on the left side of the diagram. The
> speech input circuits for a voice transmitter; the antenna coupling and RF preamp (if any) for a receiver, etc., all seem to be drawn on the left.
>
> In the tube days at least (and to some degree with solid-state homebrew today) we seem to build the actual equipment the same way: the earliest stages
> are physically on the left side of the gear.
>
> Of course, in Western culture we also read and write from left to right. I suppose we learn to look for the beginning of a story on the left side of
> the page.
>
> And of course, in some other cultures, people read and write from *right to left*.
>
> When people from these cultures become involved in radio, do they draw schematics (and build gear?) in the same direction Westerners do? Or do they
> work "backwards"?
>
> --
>
> Doug Smith W9WI
> Pleasant View, TN EM66

I don't know about how other engineers from other cultures think about schematics and how they should be drawn, though I suspect that they are biased more by the idea that schematics are a whole different "language" than their native written language. Those engineers I have known from cultures where the written language "goes" in a different direction than mine still seem to draw schematics pretty much like I do.

These days, I use computer programs to capture schematics, and they support multiple page hierarchy. The result is that I try to keep functional blocks on the same "page," but the order of the pages is not necessarily consistent from one project to the next. The left-to-right flow on a page is strongly influenced by the fact that symbols for parts like transistors and amplifiers that have an "input" and an "output" all come in with the input on the left and the output on the right. I have to rotate or mirror the symbol to have it go the opposite direction. Sometimes I indeed do just that: for example, I'll draw a differential amplifier stage with one transistor in the

native orientation, and the one to its right in the mirrored orientation.

I wonder if anyone would complain if I made a point of drawing a whole schematic package "backwards" with inputs on the right and outputs on the left... and maybe make things flow more from bottom to top...

Cheers,
Tom

1184. Re: Puff 2.1

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-22 04:28:52 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <ca75d548-89f4-4e02-944d-b2a61d5a3b1c@u8g2000prd.googlegroups.com>
Source record: 2287

On Nov 21, 12:27 pm, "Leland C. Scott" <kc8...@arrl.net> wrote:
> Does anybody have a copy of the manual for Puff 2.1? Also is the source code
> available anywhere for download? I have a copy of the program for a DOS
> version, seems to work with DosBox in Linux, however if I can get the source
> code there is a way to recompile it to run natively under Linux.
>
> 73's
>
> Leland C. Scott
> KC8LDO

Leland, see http://wwwhome.cs.utwente.nl/~ptdeboer/ham/puff.html. It
may have just what you want, and at very least is a link to someone
you can share ideas with. (Isn't Google wonderful??)

Cheers,
Tom

1185. Re: Right-to-left schematics?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-22 13:06:48 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <WoWdnYuiPvP0qpTWnZ2dnUVZ_j6dnZ2d@bright.net>
Source record: 2288

K7ITM wrote:
> On Oct 25, 5:41 am, sorry-spammers <""w9wi\"@(sorry-spammers)"> wrote:

>>
>> Paging through an old QST, it dawned on me that when schematics are drawn, usually the earliest stages are drawn on the left side of the diagram. The
>> speech input circuits for a voice transmitter; the antenna coupling and RF preamp (if any) for a receiver, etc., all seem to be drawn on the left.

For me, I draw schematics left to right mostly because I'm right-handed
and don't want my hand to smear the fresh ink or pencil lead across my
pretty picture :)

Scott
N0EDV

1186. Re: Puff 2.1

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-22 16:45:00 UTC
From: BakersT <nomailpls@domain.invalid>
Message-ID: <nomailpls-946A42.11445922112009@202-177-16-121.kddi.net.hk>
Source record: 2289
Cross-posted to: alt.ham-radio.uwave,rec.radio.amateur.homebrew

In article <qMmdneawEMKq0JXWnZ2dnUVZ_jSdnZ2d@giganews.com>,
"Leland C. Scott" <kc8ldo@arrl.net> wrote:

> Does anybody have a copy of the manual for Puff 2.1? Also is the source code
> available anywhere for download? I have a copy of the program for a DOS
> version, seems to work with DosBox in Linux, however if I can get the source
> code there is a way to recompile it to run natively under Linux.

You might want to check out
<http://www.its.caltech.edu/~mmic/puffindex/Linux/pufflinux.html>

1187. Re: Right-to-left schematics?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-23 00:30:49 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnhgjlub.1d9p.bit-bucket@shell.config.com>
Source record: 2290

On 20 Nov 2009 15:54:49 GMT, Allodoxaphobia wrote:
> On Tue, 27 Oct 2009 09:25:27 -0700 (PDT), Tim Shoppa wrote:
>> On Oct 25, 9:41ï¿½am, sorry-spammers <""w9wi\"@(sorry-spammers)"> wrote:
>>> Paging through an old QST, it dawned on me that when schematics are drawn, usually the earliest stages are drawn on the left side of the diagram. ï¿½The
>>> speech input circuits for a voice transmitter; the antenna coupling and RF preamp (if any) for a receiver, etc., all seem to be drawn on the left.
>>>
>>> In the tube days at least (and to some degree with solid-state homebrew today) we seem to build the actual equipment the same way: the earliest stages
>>> are physically on the left side of the gear.
>>
>> In the 70's I was befuddled by a bunch of schematics from England that
>> I had to decode. I came to the conclusion that they were hard to read
>> because they drive on the wrong side of the road over there. But
>> really they were just using (by my standards) some odd symbols or odd
>> line thicknesses oddly placed. In my experience the choice of odd or
>> unconventional or even just different symbols is a far bigger barrier
>> to schematics between different cultures than any left-to-right bias.
>
> Many old TRF schematics went left-to-right and then right-to-left.
> This was done, I believe, to make it all fit on a 'standard' sized sheet
> of paper. The antenna input was in the upper left -- with the RF
> sections runing on towards the right. Just before, or just after, the
> diode detection, the signal path would drop down the righthand side of
> the schematic and then audio section(s) would run left-to-right.
^^^^^^^^^^^^^
sigh... . . . . . Of course I meant "right-to-left".

Jonesy

1188. Re: Right-to-left schematics?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-23 02:05:26 UTC
From: Joel Koltner <zapwireDASHgroups@yahoo.com>
Message-ID: <s6mOm.259975$Jp1.2650@en-nntp-02.dc1.easynews.com>
Source record: 2291

"K7ITM" <k7itm@msn.com> wrote in message
news:eeae3c6c-4f00-4c01-a9af-e83cbb7b5d92@2g2000prl.googlegroups.com...
On Oct 25, 5:41 am, sorry-spammers <""w9wi\"@(sorry-spammers)"> wrote:
> I wonder if anyone would complain if I made a point of drawing a whole
> schematic package "backwards" with inputs on the right and outputs on
> the left... and maybe make things flow more from bottom to top...

I would hope someone would mention it in your next design review. I have a couple of circuit books where the author spend a few pages mentioning how there is a marked difference in the understandability of schematics based on how they're drawn, particularly for things like differential pairs which, as you mentioned, people "expect" to be facing one another.

It seems like your employer decided that all power buttons should go on the lower-level corner of equipment as well!

1189. Re: Puff 2.1

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-24 04:14:27 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <57mdnczBdr01wJbWnZ2dnUVZ_tOdnZ2d@giganews.com>
Source record: 2292
Cross-posted to: alt.ham-radio.uwave,rec.radio.amateur.homebrew

Thanks. I have the needed files to modify the source code. The problem is I need the original Turbo Pascal source code. I know somebody that's coming here from the UK and there is a company there that sells a copy of the manual on disk with the source code, I hope, and will see if they can get me a copy before they leave.

The software executable itself I have. Its available from several sources on the 'net.

73's

Leland C. Scott
KC8LDO

"BakersT" <nomailpls@domain.invalid> wrote in message
news:nomailpls-946A42.11445922112009@202-177-16-121.kddi.net.hk...
> In article <qMmdneawEMKq0JXWnZ2dnUVZ_jSdnZ2d@giganews.com>,
> "Leland C. Scott" <kc8ldo@arrl.net> wrote:
>
>> Does anybody have a copy of the manual for Puff 2.1? Also is the source
>> code
>> available anywhere for download? I have a copy of the program for a DOS
>> version, seems to work with DosBox in Linux, however if I can get the
>> source
>> code there is a way to recompile it to run natively under Linux.
>
> You might want to check out
> <http://www.its.caltech.edu/~mmic/puffindex/Linux/pufflinux.html>

1190. 3:1 range VCO and varactor RF voltage swing

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-26 01:10:07 UTC
From: lw1ecp <danyperez1@yahoo.com.ar>
Message-ID: <18993b23-0060-4995-9e00-b8a601cbfd0f@j4g2000yqe.googlegroups.com>
Source record: 2293

Hi!. I need to cover the HF and VHF ranges with as few VCOs as possible. Think of this as the varactor version of the old general purpose RF bench generators or grid-dip-meters. I know the penalties: high phase noise, high drift, high harmonic content. I don't care, this won't be made into a high dynamic range receiver.
What I do need is a reliable means to keep the peak-to-peak RF voltage across the varactors (varicaps) below 1 or 0.5Vp-p. Otherwise, even having back-to-back diodes they rectify the RF, create a DC component into the 100k resistor that feeds the tuning voltage, and this dramatically raises the bottom frequency. If I reduce the R, the f goes lower, but the RF is nastily clipped by the diodes.
The oscillator is a FET Hartley (no Colpitts capacitive tap in order to maximize C swing). All attempts I made on Spice and in real life to AGC the amplitude always created a low frequency relaxation oscillation.
Can anybody tell me about a proven way to accomplish this?. I have already googled a little with no success.
Many thanks!

1191. Re: www.sm0vpo.com (at long last)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-26 01:24:03 UTC
From: lw1ecp <danyperez1@yahoo.com.ar>
Message-ID: <66d29f4d-ffcc-4553-a14a-1960d64820da@b2g2000yqi.googlegroups.com>
Source record: 2294

Congratulations!. And let's hope you get soon an even better present:
a new job!!!.
And in case you still have those Ericsson shares, let's everybody
purchase Ericsson mobiles! ;-)

1192. Re: 3:1 range VCO and varactor RF voltage swing

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-26 01:31:53 UTC
From: Bill Baka <bbaka@comcast.net>
Message-ID: <heklq9$2vs$4@news.eternal-september.org>
Source record: 2295

lw1ecp wrote:
> Hi!. I need to cover the HF and VHF ranges with as few VCOs as
> possible. Think of this as the varactor version of the old general
> purpose RF bench generators or grid-dip-meters. I know the penalties:
> high phase noise, high drift, high harmonic content. I don't care,
> this won't be made into a high dynamic range receiver.
> What I do need is a reliable means to keep the peak-to-peak RF voltage
> across the varactors (varicaps) below 1 or 0.5Vp-p. Otherwise, even
> having back-to-back diodes they rectify the RF, create a DC component
> into the 100k resistor that feeds the tuning voltage, and this
> dramatically raises the bottom frequency. If I reduce the R, the f
> goes lower, but the RF is nastily clipped by the diodes.
> The oscillator is a FET Hartley (no Colpitts capacitive tap in order
> to maximize C swing). All attempts I made on Spice and in real life to
> AGC the amplitude always created a low frequency relaxation
> oscillation.
> Can anybody tell me about a proven way to accomplish this?. I have
> already googled a little with no success.
> Many thanks!

See if you can find any of the old (now) op-amp cook books or general applications manuals. I saw one with a modified Wien-bridge that had an AGC, but that was in 1975 for a breadboard I was doing.
Good luck.
Bill Baka

1193. Re: 3:1 range VCO and varactor RF voltage swing

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-26 02:01:14 UTC
From: lw1ecp <danyperez1@yahoo.com.ar>
Message-ID: <2f64fde9-0aa1-4305-aa89-9e450e1c1926@e23g2000yqd.googlegroups.com>
Source record: 2296

> I saw one with a modified Wien-bridge that had an AGC (...)
Thanks Bill for your immediate answer!. Yes, RC oscillators have impressive f spans: you change R or C by 10:1 and f changes 10:1, not its square root. But... my needs go into the many hundreds MHz, sorry, I have to stick to LC oscillators.

1194. Re: 3:1 range VCO and varactor RF voltage swing

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-26 03:30:40 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <-v-dncn0oOv9a5DWnZ2dnUVZ_sBi4p2d@web-ster.com>
Source record: 2297

On Wed, 25 Nov 2009 17:10:07 -0800, lw1ecp wrote:

> Hi!. I need to cover the HF and VHF ranges with as few VCOs as possible.
> Think of this as the varactor version of the old general purpose RF
> bench generators or grid-dip-meters. I know the penalties: high phase
> noise, high drift, high harmonic content. I don't care, this won't be
> made into a high dynamic range receiver. What I do need is a reliable
> means to keep the peak-to-peak RF voltage across the varactors
> (varicaps) below 1 or 0.5Vp-p. Otherwise, even having back-to-back
> diodes they rectify the RF, create a DC component into the 100k resistor
> that feeds the tuning voltage, and this dramatically raises the bottom
> frequency. If I reduce the R, the f goes lower, but the RF is nastily
> clipped by the diodes. The oscillator is a FET Hartley (no Colpitts
> capacitive tap in order to maximize C swing). All attempts I made on
> Spice and in real life to AGC the amplitude always created a low
> frequency relaxation oscillation.
> Can anybody tell me about a proven way to accomplish this?. I have
> already googled a little with no success. Many thanks!

How elaborate an AGC loop are you trying? The _really pedantic_ way to
do it would be to use a separate amplitude detector, an op-amp controller
(which would let your controller be if not arbitrarily then at least
really really slow), and whatever bias point on the oscillator you're
changing to effect the gain.

This should let you get a pretty fancy transfer function on your
controller, to relieve the motor-boating.

--
www.wescottdesign.com

1195. Re: 3:1 range VCO and varactor RF voltage swing

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-26 03:46:55 UTC
From: Bill Baka <bbaka@comcast.net>
Message-ID: <hektnf$q1v$2@news.eternal-september.org>
Source record: 2298

lw1ecp wrote:
>> I saw one with a modified Wien-bridge that had an AGC (...)
> Thanks Bill for your immediate answer!. Yes, RC oscillators have
> impressive f spans: you change R or C by 10:1 and f changes 10:1, not
> its square root. But... my needs go into the many hundreds MHz, sorry,
> I have to stick to LC oscillators.
>
>
Many hundreds of MHz? Are you trying for D.C. to daylight? I could poke around a bit and see if I could trip over something while I look for parts for my own projects. Are you looking to build or buy? It seems you want a circuit to build. Am I on the right track? Some of the older ARRL handbooks may have a circuit or two. Lately I have seen them migrating towards VHF and UHF and higher frequency stuff.
Good luck.
Bill Baka

1196. Re: 3:1 range VCO and varactor RF voltage swing

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-26 04:02:36 UTC
From: artie <artie.m@gNOSPAMmail.com>
Message-ID: <251120092002367826%artie.m@gNOSPAMmail.com>
Source record: 2299

In article <hektnf$q1v$2@news.eternal-september.org>, Bill Baka
<bbaka@comcast.net> wrote:

> lw1ecp wrote:
> >> I saw one with a modified Wien-bridge that had an AGC (...)
> > > Thanks Bill for your immediate answer!. Yes, RC oscillators have
> > > impressive f spans: you change R or C by 10:1 and f changes 10:1, not
> > > its square root. But... my needs go into the many hundreds MHz, sorry,
> > > I have to stick to LC oscillators.
> > >
> > >
> Many hundreds of MHz? Are you trying for D.C. to daylight? I could poke
> around a bit and see if I could trip over something while I look for
> parts for my own projects. Are you looking to build or buy? It seems you
> want a circuit to build. Am I on the right track? Some of the older ARRL
> handbooks may have a circuit or two. Lately I have seen them migrating
> towards VHF and UHF and higher frequency stuff.
> Good luck.
> Bill Baka

A typical way of getting this kind of range is to use a pair of
oscillators, at least one voltage controlled, a mixer, and a low pass
filter -- with the amplitude stabilizing loop described previously.

Use a pair of YIG tuned oscillators and a wideband mixer, and you can
get as wide a range as you want -- a lot of sweep generators work this
way.

You could use a pair of Mini Circuits VCOs in the 2 to 4 GHz range and
build a vco with a few hundred MHz range.

1197. Re: 3:1 range VCO and varactor RF voltage swing

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-26 05:26:18 UTC
From: WA4VZQ <none@nospam.org>
Message-ID: <_joPm.78445$Wf2.75107@newsfe23.iad>
Source record: 2300

"lw1ecp" <danyperez1@yahoo.com.ar> wrote in message
news:2f64fde9-0aa1-4305-aa89-9e450e1c1926@e23g2000yqd.googlegroups.com...
>> I saw one with a modified Wien-bridge that had an AGC (...)
> Thanks Bill for your immediate answer!. Yes, RC oscillators have
> impressive f spans: you change R or C by 10:1 and f changes 10:1, not
> its square root. But... my needs go into the many hundreds MHz, sorry,
> I have to stick to LC oscillators.

I remember what was known as a "seven league oscillator" which derived its name from the folklore of "seven league boots". The design was discussed in one of my old 1930's vintage vacuum tube books. If I remember correctly, one such oscillator covered from a few Hertz to several MHz. Unfortunately I am in SC and my library is back in Tennessee.

My memory may be wrong, but I think the book was "Functional Circuits and Oscillators" by Herbert Reich.

73, Dr. Barry L. Ornitz WA4VZQ

1198. Re: 3:1 range VCO and varactor RF voltage swing

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-26 06:17:41 UTC
From: lw1ecp <danyperez1@yahoo.com.ar>
Message-ID: <a6888c2a-b312-443b-ae70-9af93355b95d@l13g2000yqb.googlegroups.com>
Source record: 2151

I'm astonished at the tsunami of answers this arose!.
- Tim: yes: detector + error amplifier (minimum gain, even a single NPN) + FET bias shifting.
- Bill: I love old ARRL publications, 80's QSTs are my favorites, but 3:1 (continuous) coverage is not common on ham bands. I am looking to build, and design (oh, well, guesstimate).
- Artie and Barry: I knew the heterodyne way of getting broad coverage thanks to the old Wavetek 2000 Sweep/Signal Generator. This is also used in tracking generators for spectrum analyzers. But keeping unwanted mixing products low is an art. Maybe later.
But, the first answer from Tim made me think: what's the difference in amplitude stabilizing methods on a Wien bridge and my Hartley?. In a RC oscillator you control amplitude thru some voltage dependent resistance (a lamp, a FET channel, etc.). But in my oscillator I vary it thru gate bias, which varies the average transconductance of a device working in a (nonlinear) class C. So, I Spice'd a FET damping the coil (source) tap with its Rds being controlled by oscillations amplitude, an voilà!, I got ~1Vp-p at the gate (and the varicaps), the gate's 1N4148 almost does not conduct. I will try a more decent of controlling the feedback (without ruining Q) and let you know.

1199. Re: 3:1 range VCO and varactor RF voltage swing

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-26 12:01:09 UTC
From: brian whatcott <betwys1@sbcglobal.net>
Message-ID: <58-dnewys-e885PWnZ2dnUVZ_hmdnZ2d@giganews.com>
Source record: 2152

Bill Baka wrote:
> lw1ecp wrote:
>> Hi!. I need to cover the HF and VHF ranges with as few VCOs as
>> possible. Think of this as the varactor version of the old general
>> purpose RF bench generators or grid-dip-meters. I know the penalties:
>> high phase noise, high drift, high harmonic content. I don't care,
>> this won't be made into a high dynamic range receiver.
>> What I do need is a reliable means to keep the peak-to-peak RF voltage
>> across the varactors (varicaps) below 1 or 0.5Vp-p. Otherwise, even
>> having back-to-back diodes they rectify the RF, create a DC component
>> into the 100k resistor that feeds the tuning voltage, and this
>> dramatically raises the bottom frequency. If I reduce the R, the f
>> goes lower, but the RF is nastily clipped by the diodes.
>> The oscillator is a FET Hartley (no Colpitts capacitive tap in order
>> to maximize C swing). All attempts I made on Spice and in real life to
>> AGC the amplitude always created a low frequency relaxation
>> oscillation.
>> Can anybody tell me about a proven way to accomplish this?. I have
>> already googled a little with no success.
>> Many thanks!
>
> See if you can find any of the old (now) op-amp cook books or general
> applications manuals. I saw one with a modified Wien-bridge that had an
> AGC, but that was in 1975 for a breadboard I was doing.
> Good luck.
> Bill Baka

The old school method - for a wien bridge for example - was to place a
small filament bulb in the feedback path. This had a non linear response
to amplitude - and a low natural bandwidth. It's that slow response
that you have been lacking, apparently. Putting together an op amp
with variable amplitude output that is smoothed on a five+ second time
constant is what you need.

Brian W

1200. Re: 3:1 range VCO and varactor RF voltage swing

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-26 16:18:03 UTC
From: Doug White <gwhite@alum.mit.edu>
Message-ID: <Xns9CCF72F62B091gwhitealummitedu@69.16.186.50>
Source record: 2153

lw1ecp <danyperez1@yahoo.com.ar> wrote in news:a6888c2a-b312-443b-ae70-9af93355b95d@l13g2000yqb.googlegroups.com:

<snip>
> - Artie and Barry: I knew the heterodyne way of getting broad coverage
> thanks to the old Wavetek 2000 Sweep/Signal Generator. This is also
> used in tracking generators for spectrum analyzers. But keeping
> unwanted mixing products low is an art. Maybe later.

No big deal. Use two high freqeuncy oscillators (one fixed, one tunable), say around 2 GHz. When you mix them, the difference freqeuncy gives you the low freqeuncy you want, and the sum freqeuncy will be around 4 GHz & easily filtered out. The higher order terms that might be an issue will be things like three times one minus twice the other. A little care with your frequency plan & a good mixer & you should be fine.

There is a free DOS executable mixer spur calculator buried in with the MARTHA/LLAMA APL CAD software: http://www.marthallama.org/
The program is MIXSPUR.EXE, and is included in the LLAMA distribution. It is documented in the LLAMA manual. No APL is required.

If folks are interested, I could put together standalone documentation on MIXSPUR & park it and the executable on my personal website.

Doug White

1201. Re: 3:1 range VCO and varactor RF voltage swing

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-26 17:29:17 UTC
From: raypsi <rborowiak@gmail.com>
Message-ID: <374e9bf7-ddc2-4c87-8700-feb41b7ce799@l13g2000yqb.googlegroups.com>
Source record: 2154

Hey OM:

Maybe you should looky at an old NTSC tv tuner. The brothers at RCA,
made sum tuners for the cable tv bands that went from 5Mhz all the way
up to 900Mhz

And they did it with quad matched varicaps, dual gate FET's, and a
PLL.

Not only did they control the VCO, but the TRF front end also.

Me thinks your OSC is way to efficient and your Q is way to high. Roll
the Q down with the right LC ratio or swamp it with sum resistance.

If you series varicaps you would increase the the amount of RF voltage
they could handle before starting to rectifry the RF.

73 OM
de n8zu

1202. Simple unregulated switchable dual voltage rectifier circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-29 05:23:07 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <e75f2698-6357-4f2b-bdd3-0abf8e23bb0a@x25g2000prf.googlegroups.com>
Source record: 2155

Hi Guys,

Ages ago I saw a very simple circuit - a CT transformer, couple of
caps, 4 rectifiers and a change over switch.

With the switch in one position, the circuit was a bridge rectifier,
in the other, a voltage doubler.

Pointers please, I have forgotten where I saw this...

Thanks,

Mark

1203. Re: Simple unregulated switchable dual voltage rectifier circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-29 07:20:30 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <c2f021ca-b7bb-4adc-b336-2cb7f9f6b275@f20g2000prn.googlegroups.com>
Source record: 2156

On Nov 28, 9:23 pm, MarkAren <markare...@yahoo.com> wrote:
> Hi Guys,
>
> Ages ago I saw a very simple circuit - a CT transformer, couple of
> caps, 4 rectifiers and a change over switch.
>
> With the switch in one position, the circuit was a bridge rectifier,
> in the other, a voltage doubler.
>
> Pointers please, I have forgotten where I saw this...
>
> Thanks,
>
> Mark

Just draw a standard bridge rectifier circuit, bridge across the full transformer secondary, filter capacitor at the bridge output. Now--break the connection from the capacitor (-) to the bridge, and put in a SPDT switch, wiper to the cap (and to ground, if you will) and the two possible connections to either the bridge negative output, or to the transformer secondary center tap. There's no problem connecting to the transformer center tap with the bridge (-) floating. You can also use this basic circuit to supply two voltages at once: connect up a bridge circuit, and ground the bridge/cap (-), and also put a cap from transformer CT to ground. The bridge output (peak) will be nominally 1.4* the RMS transformer full secondary (minus a couple diode drops), and the CT output will be half that. Or, you can ground the CT and have + and - nominally equal voltages, assuming the loads on both sides are similar.

Cheers,
Tom

1204. Re: Simple unregulated switchable dual voltage rectifier circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-29 08:33:13 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <c2f6e668-83b7-4123-bde6-8a7b59805d72@u18g2000pro.googlegroups.com>
Source record: 2157

Bingo !

http://www.idesignz.org/misc/Simple%20dual%20voltage%20PSU.pdf

Thanks,

Mark

1205. Re: Simple unregulated switchable dual voltage rectifier circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-29 13:54:36 UTC
From: Joop <jojo@xs4all.nl>
Message-ID: <94v4h59glecttmo38eoh0dcucvroa5e2vb@4ax.com>
Source record: 2158

On Sun, 29 Nov 2009 00:33:13 -0800 (PST), MarkAren
<markaren10@yahoo.com> wrote:

>Bingo !
>
>http://www.idesignz.org/misc/Simple%20dual%20voltage%20PSU.pdf
>
>Thanks,
>
>Mark
This is a circuit that does not suffer from temporary abcense of power
during switching. And it is using a transformer with a single
secundary winding.
http://www.gigawatts.nl/co/projects/voeding/dubbel/switch.jpg

Joop

1206. Re: Simple unregulated switchable dual voltage rectifier circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-29 17:42:40 UTC
From: MarkAren <markaren10@yahoo.com>
Message-ID: <615ac667-bfe0-4022-8842-52927416a55f@r24g2000prf.googlegroups.com>
Source record: 2159

Hi Joop,

Interesting circuit.

Where does the R1/D1/Q/.Q2 reference point connect to ?

I assume the parasitic diodes in Q1/Q2 form a current path ?

-Mark

On Nov 30, 2:54 am, Joop <j...@xs4all.nl> wrote:
> On Sun, 29 Nov 2009 00:33:13 -0800 (PST), MarkAren
>
> <markare...@yahoo.com> wrote:
> >Bingo !
>
> >http://www.idesignz.org/misc/Simple%20dual%20voltage%20PSU.pdf
>
> >Thanks,
>
> >Mark
>
> This is a circuit that does not suffer from temporary abcense of power
> during switching. And it is using a transformer with a single
> secundary winding.http://www.gigawatts.nl/co/projects/voeding/dubbel/switch.jpg
>
> Joop

1207. Re: Simple unregulated switchable dual voltage rectifier circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-29 20:27:36 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <986633c0-92dc-4b07-a3d7-67f67c3c8968@s21g2000prm.googlegroups.com>
Source record: 2160

On Nov 29, 9:42 am, MarkAren <markare...@yahoo.com> wrote:
> Hi Joop,
>
> Interesting circuit.
>
> Where does the R1/D1/Q/.Q2 reference point connect to ?
>
> I assume the parasitic diodes in Q1/Q2 form a current path ?
>
> -Mark
...

The idea is that by using two MOSFETs in (anti)series like that, the parasitic diodes can't conduct through from q1.drain to q2.drain. However, they (the parasitic diodes) insure that q1.source=q2.source is at most a diode drop higher than the lower of q1.drain and q2.drain. Then if the photocoupler is "on", the gates are pulled up toward close to the most positive voltage in the circuit, limited of course by the zener diode to protect against gate-source breakdown. In that state, both Q1 and Q2 are hard on. They are happy to conduct as "on" FETs in either direction. If the photocoupler is "off," the gate-source potential drops to essentially zero, and both FETs are off, leaving only the back-to-back parasitic diodes.

Essentially the same circuit is used in certain optically coupled relays, such as the Panasonic "PhotoMOS" relays, and in other places. Although the "on" resistance is twice as high as a single MOSFET of the same type, the circuit blocks both polarities when "off," and conducts either direction when "on."

Cheers,
Tom

1208. Re: Simple unregulated switchable dual voltage rectifier circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-29 20:31:19 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <060c16a3-1666-453f-9251-85b3925b0f08@u25g2000prh.googlegroups.com>
Source record: 2161

On Nov 29, 5:54 am, Joop <j...@xs4all.nl> wrote:
> On Sun, 29 Nov 2009 00:33:13 -0800 (PST), MarkAren
>
> <markare...@yahoo.com> wrote:
> >Bingo !
>
> >http://www.idesignz.org/misc/Simple%20dual%20voltage%20PSU.pdf
>
> >Thanks,
>
> >Mark
>
> This is a circuit that does not suffer from temporary abcense of power
> during switching. And it is using a transformer with a single
> secundary winding.http://www.gigawatts.nl/co/projects/voeding/dubbel/switch.jpg
>
> Joop

But should note that it puts out twice the voltage from the same
transformer as compared with the bridge/CT circuit. On the other
hand, both voltages use the whole secondary, so the safe available
output power is nominally the same for either voltage, whereas the
output power in the full-wave CT circuit is somewhat less than in the
bridge configuration (assuming negligible loss in the diodes).

Cheers,
Tom

1209. Re: 3:1 range VCO and varactor RF voltage swing

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-30 02:07:04 UTC
From: lw1ecp <danyperez1@yahoo.com.ar>
Message-ID: <fb6423b5-464a-44cf-aa3e-7c9fc9d1177f@v25g2000yqk.googlegroups.com>
Source record: 2162

Raypsi:
- Thank you for the hint, the CATV tuners cover 54 to 900 MHz (5 to ~40 is for the upstream), an impressive 16:1 range, but the L.O. is much narrower in relative values. Suppose 1st IF at 1200MHz, the L.O. would sweep 1254 to 2100, 1.67:1, not enough for me.
- "The TRF front end also". Are you sure?. I dismantled a Jerrold and the incoming CATV hit directly the balanced modulator thru a fixed high-pass. But even if it really tuned 54-900, it would be easier than my needs because the CATV amplitude is much lower than in an oscillator.
- "Roll the Q down"?. It wouldn't help, I just need to vary 9:1 the LC product.
- "Series varicaps"?. Sorry... they are back-to-back in series already!.
Doug:
Thank you for encouraging me about the heterodyne way, and the links. Yes, I think I will go this way for my gen-purp lab generator, but for the dipper I still need the coil to oscillate right at the measured frequency.
Brian:
I'm afraid this is more complicated than choosing a long time constant, I have already tried in the simulation. The problem seems to stem from the fact that the effective FET gm is dependent not only on applied bias but also on RF amplitude. The error amplifier senses the amplitude is high, applies more -Vgs, gm decreases, amplitude decreases, but this lower amplitude makes effective gm to fall even more, and as a result oscillation ceases and then starts again, and again, and again. I think I will have to prevent the FET from working in class C and forget about Vgs as a control means.
Again, many thanks to all of you. As soon as I can come back to this subject I will let you know the results.

1210. Re: Simple unregulated switchable dual voltage rectifier circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-30 02:39:55 UTC
From: lw1ecp <danyperez1@yahoo.com.ar>
Message-ID: <c133c287-699d-4b35-832d-bb914a9e702b@j24g2000yqa.googlegroups.com>
Source record: 2163

The idea behind www.gigawatts.nl/co/projects/voeding/dubbel/switch.jpg
is the same as the PC PSUs: you close a connection and it works on
115Vac, you open it and plug the PSU into 230V.

And if you go as in www.idesignz.org/misc/Simple%20dual%20voltage%20PSU.pdf
you're right that the full-wave center-tap mode does not make full use
of the transformer copper (by the way, just adding an electrolytic on
the center-tap in place of the switch you can have the two output
voltages simultaneously). It's unavoidable, unless wou have two
independent secondaries, of course: put both in series or both in
parallel.

But if you are looking for having two different output voltages (not
same DC voltage with 115 or 230 mains), and want to make the best use
of your electrolytics (specially if they are big ones), you should
need a means to put them in parallel for the low setting, and series
for the high. I did it with a DPDT non-shortcircuiting switch. No
center-tap (becomes a full-wave doubler as in the gigawatts link). If
you are interested I will gladly send it to your address, but you can
help me and the Group if you can suggest a convenient way to post
files somewhere (not a volatile place such as rapidshare).

1211. Re: 3:1 range VCO and varactor RF voltage swing

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-30 04:32:22 UTC
From: brian whatcott <betwys1@sbcglobal.net>
Message-ID: <YP6dnfeLiv-G1o7WnZ2dnUVZ_qJi4p2d@giganews.com>
Source record: 2164

lw1ecp wrote:
/snip/
> - "Series varicaps"?. Sorry... they are back-to-back in series
> already!.
>

I understood the suggestion was to place two varicaps in series
NOT back to back in order to extend the voltage range.
But that implies two series strings, in order to maintain the
capacitance range over a longer voltage swing??

Brian W

1212. Re: 3:1 range VCO and varactor RF voltage swing

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-11-30 12:38:42 UTC
From: raypsi <rborowiak@gmail.com>
Message-ID: <79ffaffd-4c40-4b82-be11-602bb4a843bb@k19g2000yqc.googlegroups.com>
Source record: 2165

Hey OM:

Well the dual gate FET's RCA was using were sub 1Ghz range so not only
were they controlling the bias, also they controled the miller effect
with an isolated supply for the second gate.

I should has ment 50Mhz to 900Mhz it was the splitters we used were
rated 5Mhz to 900Mhz.

So 8 varicaps in back to back series would be to much? Giving you
double the voltage and the same C.
You may be right 54Vdc would be way too much to have floating around
to tune them.
I remember the ones RCA used were so small if you dropped one on the
floor you would never ever find it.

They diode switched in 2 sets of coils in both the OSC and TRF, to get
LO VHF, HI VHF, and UHF.
So like they had 3 coils in series, all 3 for the LO, 2 for the HI,
and 1 for the UHF

73 OM
de n8zu

On Nov 29, 11:32 pm, brian whatcott <betw...@sbcglobal.net> wrote:
> lw1ecp wrote:
>
> /snip/
>
> > - "Series varicaps"?. Sorry... they are back-to-back in series
> > already!.
>
> I understood the suggestion was to place two varicaps in series
> NOT back to back in order to extend the voltage range.
> But that implies two series strings, in order to maintain the
> capacitance range over a longer voltage swing??
>
> Brian W

1213. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-01 07:00:08 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1259650800@panix.com>
Source record: 2166
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

1214. Re: 3:1 range VCO and varactor RF voltage swing

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-02 13:58:29 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <40b6ddcc-b3be-4c7f-a8b9-c989c4ea182b@1g2000vbm.googlegroups.com>
Source record: 2167

On Nov 29, 9:07 pm, lw1ecp <danyper...@yahoo.com.ar> wrote:
> Raypsi:
> - Thank you for the hint, the CATV tuners cover 54 to 900 MHz (5 to
> ~40 is for the upstream), an impressive 16:1 range, but the L.O. is
> much narrower in relative values. Suppose 1st IF at 1200MHz, the L.O.
> would sweep 1254 to 2100, 1.67:1, not enough for me.

I think maybe you're looking at the wrong generation of CATV tuners. I think Raypsi's suggestion was for the little tin-can tuners common in say 80's and 90's VCR's, these certainly did NOT have a 1200MHz IF, closer to 45MHz.

Tim.

1215. Re: 3:1 range VCO and varactor RF voltage swing

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-02 14:03:59 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <5a774f5a-4b73-4660-b277-916de5b90200@p23g2000vbl.googlegroups.com>
Source record: 2168

On Nov 25, 8:10 pm, lw1ecp <danyper...@yahoo.com.ar> wrote:
> Hi!. I need to cover the HF and VHF ranges with as few VCOs as
> possible. Think of this as the varactor version of the old general
> purpose RF bench generators or grid-dip-meters. I know the penalties:
> high phase noise, high drift, high harmonic content. I don't care,
> this won't be made into a high dynamic range receiver.
> What I do need is a reliable means to keep the peak-to-peak RF voltage
> across the varactors (varicaps) below 1 or 0.5Vp-p.

Look at the Elecraft K2's VCO. A single VCO covers all the HF bands
(some with up and others with downconversion), with many narrow ranges
all cleverly switched using small relays to move the varactors/fixed
capacitors in and out. I can't promise that this is exactly what you
want but there's much to be learned by studying it if you want to
build wide-range VCO's with commodity parts.

The Elecraft K2 VCO also uses a clever scheme to do AGC such that the
VCO output remains constant through its wide range, this probably also
keeps the RF voltage across the varicap in check.

There's a lot of cleverness in the K2. Schematics are online, www.elecraft.com.

Tim N3QE

1216. Re: 3:1 range VCO and varactor RF voltage swing

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-03 09:58:20 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <Qut$aTK8u4FLFw$9@g3ohx.demon.co.uk>
Source record: 2169

In message
<40b6ddcc-b3be-4c7f-a8b9-c989c4ea182b@1g2000vbm.googlegroups.com>, Tim
Shoppa <shoppa@trailing-edge.com> writes
>On Nov 29, 9:07ï¿½pm, lw1ecp <danyper...@yahoo.com.ar> wrote:
>> Raypsi:
>> - Thank you for the hint, the CATV tuners cover 54 to 900 MHz (5 to
>> ~40 is for the upstream), an impressive 16:1 range, but the L.O. is
>> much narrower in relative values. Suppose 1st IF at 1200MHz, the L.O.
>> would sweep 1254 to 2100, 1.67:1, not enough for me.
>
>I think maybe you're looking at the wrong generation of CATV tuners. I
>think Raypsi's suggestion was for the little tin-can tuners common in
>say 80's and 90's VCR's, these certainly did NOT have a 1200MHz IF,
>closer to 45MHz.
>
In the 1980s and 90s, I was intimately involved in many types of CATV
set-top boxes from one manufacturer. I would have thought that, even
after 10 years, I would remember to the nearest Hz what the oscillator
and IF frequencies were - but I'm afraid I can't!

However, the general plan was essentially that entire input spectrum was
bandpass filtered (via a cascaded highpass and lowpass filter), and
presented to a 4-diode ring double-balanced mixer. I'm pretty certain
that one model (50 to 550MHz) had a first IF at around 650MHz, with the
LO running from 700 to 1200MHz. This was then down-converted to a second
IF - the usual 45.75MHz (for NTSC).

It was fairly obvious that you could make a wide-range variable
oscillator (say 0 to 500MHz) by 'reversing things', using a variable
oscillator (a readily achievable 650MHz to 1150MHz), and mixing it with
a fixed oscillator on 650MHz. The output of the double balanced mixer is
taken from the IF port, which (of course) goes down to DC, and is
lowpass filtered to 500MHz. As has been stated, this is essentially the
principle used by many sweep oscillators.

For most 'amateur' purposes, there is no need to have any ALC applied to
the output signal. This is achieved by ensuring that the level of the
variable oscillator is relatively high (say 66dBmV or 2V), and that of
the fixed oscillator is relatively low (say 0.3V or 50dBmV). A normal
feature of a ring mixer is that the 'signal' loss through the mixer
(typically 6dB) is more-or-less independent of level of the local
oscillator - provided it is high enough. This means that, even if the
level of the variable oscillator varies by a few dB across its tuning
range (which it is bound to do), the mixer output level stays fairly
constant 44dBmV or around 0.15V) over the entire frequency range.

But things are not perfect. Unfortunately, in the mixer, you inevitably get mixing of the harmonics of two oscillators. The effect is to produce unexpected signals within the wanted band 0 to 500MHz (and greatly dependant on the actual frequency of the variable oscillator). I know of one commercial sweep oscillator which had, at the LF end of the band, several unwanted mixer products only 25dB down. But it was still quite usable for most lab purposes, provided you knew of its limitations. The cure for this inherent problem is to have the frequencies of both the fixed and variable oscillators as high as possible (not as stated above), but this obviously makes amateur construction more difficult.

Once you have made a satisfactory wide range oscillator, it is very easy to convert it to a sweep generator by driving the varicap of the variable oscillator from a sawtooth.
--
Ian

1217. Re: 3:1 range VCO and varactor RF voltage swing

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-03 13:42:28 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <cc82315f-6405-4acd-8728-78fb5763000e@h10g2000vbm.googlegroups.com>
Source record: 2170

On Dec 3, 4:58 am, Ian Jackson
<ianREMOVETHISjack...@g3ohx.demon.co.uk> wrote:
> In message
> <40b6ddcc-b3be-4c7f-a8b9-c989c4ea1...@1g2000vbm.googlegroups.com>,
TimShoppa<sho...@trailing-edge.com> writes
>
> In the 1980s and 90s, I was intimately involved in many types of CATV
> set-top boxes from one manufacturer. I would have thought that, even
> after 10 years, I would remember to the nearest Hz what the oscillator
> and IF frequencies were - but I'm afraid I can't!
>
> However, the general plan was essentially that entire input spectrum was
> bandpass filtered (via a cascaded highpass and lowpass filter), and
> presented to a 4-diode ring double-balanced mixer. I'm pretty certain
> that one model (50 to 550MHz) had a first IF at around 650MHz, with the
> LO running from 700 to 1200MHz. This was then down-converted to a second
> IF - the usual 45.75MHz (for NTSC).

All I know about the little tin-can tuners made by the billions in the
80's and 90's, is that antenna comes in one end, circa 45MHz IF came
out the other end :-). Maybe the ones I saw were not the DC-to-
daylight ones used for CATV. The generation I'm most familiar with
took a tuning voltage that went up to 30V or 40VDC for the varactors,
maybe that high voltage gave them a wider range with simpler
circuitry. Of course the line-operated ones had that high voltage
around for easy use in the chassis.

> For most 'amateur' purposes, there is no need to have any ALC applied to
> the output signal.

Look at the Elecraft K2's LO system. It uses a single VCO to cover all
bands, and one relevant factor that lets them use the same oscillator
for all bands is the ALC. It's a very very clever design, one that
minimizes not only parts count but the low parts count also means low
power consumption (less than 200mA for the whole rig in receive.)

Contrast that with, say, modern Japanese HF transceivers which draw
ten times as much power in receive and have these ginormously
complicated multi-loop synthesizers that in the end have worse phase
noise than the K2's simple scheme.

My gut feeling is that the Japanese rig philosophy of making sure
their receivers do DC to daylight drives up their parts count
enormously with no benefit (perhaps a negative effect) on ham band
performance. Maybe that's what the Japanese hams want. Heck, it's
probably what most US hams think they want, if for no other reason

than because the YaeKenCom ads have been pushing it as a feature (not a bug) for decades, at least as long as they've been doing upconversion ham receivers.

Of course the K2 does so well in comparison because it applies the ham-band performance simplicity philosophy not just to the LO chain but throughout.

Tim N3QE

1218. Nice project cases (cheap)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-04 23:46:06 UTC
From: amdx <amdx@knology.net>
Message-ID: <d94bc$4b199f3d$18ec6dd7$20807@KNOLOGY.NET>
Source record: 2171
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

I was looking on ebay and these cases were at the bottom of the page.
Extruded Aluminum Cases 8" x 7.25" x 1.625"
$3.00 Can't beat that price!
I don't know anything more about it, just ran across it.

http://cgi.ebay.com/Extruded-Aluminum-Cases-8-x-7-25-x-1-625-w-End-Caps_W0QQitemZ220456768844QQcategoryZ42886QQcmdZViewItemQQ_trksidZp4340.m8QQ_trkparmsZalgo%3DMW%26its%3DC%26itu%3DUCC%26otn%3D5%26ps%3D63

Mike

1219. Re: Nice project cases (cheap)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-05 16:24:06 UTC
From: Kenneth Scharf <wa2mze@bellsouth.net>
Message-ID: <hfe1evlfl1@news.eternal-september.org>
Source record: 2172
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

amdx wrote:
> I was looking on ebay and these cases were at the bottom of the page.
> Extruded Aluminum Cases 8" x 7.25" x 1.625"
> $3.00 Can't beat that price!
> I don't know anything more about it, just ran across it.
>
> http://cgi.ebay.com/Extruded-Aluminum-Cases-8-x-7-25-x-1-625-w-End-Caps_W0QQitemZ220456768844QQcategoryZ42886QQcmdZViewItemQQ_trksidZp4340.m8QQ_trkparmsZalgo%3DMW%26its%3DC%26itu%3DUCC%26otn%3D5%26ps%3D63
>
> Mike
>
>
>
Price is nice, but shipping is more than double the cost.
Then again, if you buy a few the cost of shipping per item will go down.

1220. Communications Quarterly

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-06 00:13:24 UTC
From: Harv <harvw@cox.net>
Message-ID: <784bee05-5d53-4c9d-b362-6eb287711514@33g2000vbe.googlegroups.com>
Source record: 2173

I am looking for issues of Communications Quarterly Magazine for the
years 1992 and 1993 (4 issues each year).

Does anyone have them in either hard copy or .pdf file?

Thanks

Harv
W1BMY

1221. Re: Nice project cases (cheap)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-06 02:18:17 UTC
From: Bill Baka <bbaka@comcast.net>
Message-ID: <hff49b$1kj$1@news.eternal-september.org>
Source record: 2174
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Kenneth Scharf wrote:
> amdx wrote:
>> I was looking on ebay and these cases were at the bottom of the page.
>> Extruded Aluminum Cases 8" x 7.25" x 1.625"
>> $3.00 Can't beat that price!
>> I don't know anything more about it, just ran across it.
>>
>> http://cgi.ebay.com/Extruded-Aluminum-Cases-8-x-7-25-x-1-625-w-End-Caps_W0QQitemZ220456768844QQcategoryZ42886QQcmdZViewItemQQ_trksidZp4340.m8QQ_trkparmsZalgo%3DMW%26its%3DC%26itu%3DUCC%26otn%3D5%26ps%3D63
>>
>>
>> Mike
>>
>>
>>
> Price is nice, but shipping is more than double the cost.
> Then again, if you buy a few the cost of shipping per item will go down.

How about free?
Go to any grocery store and buy something you want to eat in a can that
has the press on lid. Small ones about the size of Sardine cans make for
small and sensitive projects, and you can put these into an even bigger
can for a project. R.F. feed-throughs are not that expensive.
You could make a modular project you could upgrade when you wanted.
Cheers,
Bill Baka

I kind of miss all the old BUD boxes.

1222. Re: Nice project cases (cheap)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-06 10:56:07 UTC
From: Highlandham <highlandham_nospam@rfburns.com>
Message-ID: <D8CdnfDY3vhPEIbWnZ2dnUVZ8uGdnZ2d@pipex.net>
Source record: 2175
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Bill Baka wrote:
> Kenneth Scharf wrote:
>> amdx wrote:
>>> I was looking on ebay and these cases were at the bottom of the page.
>>> Extruded Aluminum Cases 8" x 7.25" x 1.625"
>>> $3.00 Can't beat that price!
>>> I don't know anything more about it, just ran across it.
>>>
>>> http://cgi.ebay.com/Extruded-Aluminum-Cases-8-x-7-25-x-1-625-w-End-Caps_W0QQitemZ220456768844QQcategoryZ42886QQcmdZViewItemQQ_trksidZp4340.m8QQ_trkparmsZalgo%3DMW%26its%3DC%26itu%3DUCC%26otn%3D5%26ps%3D63
>>>
>>>
>>> Mike
>>>
>>>
>>>
>> Price is nice, but shipping is more than double the cost.
>> Then again, if you buy a few the cost of shipping per item will go down.
>
> How about free?
> Go to any grocery store and buy something you want to eat in a can that
> has the press on lid. Small ones about the size of Sardine cans make for
> small and sensitive projects, and you can put these into an even bigger
> can for a project. R.F. feed-throughs are not that expensive.
> You could make a modular project you could upgrade when you wanted.
> Cheers,
> Bill Baka
>
> I kind of miss all the old BUD boxes.
==========
With PCB scrap readily available you can make any (modest) size box with
this material . I have stocked up at a fleamarket ,for life.

Frank GM0CSZ / KN6WH

1223. Re: Nice project cases (cheap)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-06 21:49:18 UTC
From: Joerg <invalid@invalid.invalid>
Message-ID: <7o2n70F3ontekU1@mid.individual.net>
Source record: 2176
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Bill Baka wrote:
> Kenneth Scharf wrote:
>> amdx wrote:
>>> I was looking on ebay and these cases were at the bottom of the page.
>>> Extruded Aluminum Cases 8" x 7.25" x 1.625"
>>> $3.00 Can't beat that price!
>>> I don't know anything more about it, just ran across it.
>>>
>>> http://cgi.ebay.com/Extruded-Aluminum-Cases-8-x-7-25-x-1-625-w-End-Caps_W0QQitemZ220456768844QQcategoryZ42886QQcmdZViewItemQQ_trksidZp4340.m8QQ_trkparmsZalgo%3DMW%26its%3DC%26itu%3DUCC%26otn%3D5%26ps%3D63
>>>
>>>
>>> Mike
>>>
>>>
>>>
>> Price is nice, but shipping is more than double the cost.
>> Then again, if you buy a few the cost of shipping per item will go down.
>
> How about free?
> Go to any grocery store and buy something you want to eat in a can that
> has the press on lid. Small ones about the size of Sardine cans make for
> small and sensitive projects, and you can put these into an even bigger
> can for a project. R.F. feed-throughs are not that expensive.
> You could make a modular project you could upgrade when you wanted.

The problem is that the sodium intake with each can of anchovies is
humongous. But they are delicious on pizza or on a cheese sandwich.
Takes a while to get the smell out of a can tho :-)

--
Regards, Joerg

http://www.analogconsultants.com/

"gmail" domain blocked because of excessive spam.
Use another domain or send PM.

1224. Seeking New FAQ/Intro Maintainers for rec.radio.amateur.*

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-07 07:05:00 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/recruitment-1-1260169500@panix.com>
Source record: 2177
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/recruitment
Revision: 1.2 2009/11/25 14:41:01
Posting-Frequency: posted monthly
URL: http://www.faqs.org/faqs/radio/personal-intro/

Changes followed by "|".

The rec.radio.info newsgroup, first established in 1993, has been
recently revived by an active moderation team. We are currently seeking
suitable information, FAQ, and bulletin articles from the entire
rec.radio.* newsgroup hierarchy for simultaneous cross-posting to our
newsgroup.

We are seeking a replacement maintainer for the following information
bulletin formerly posted to rec.radio.amateur.* (and currently archived
at http://www.faqs.org/faqs/radio/personal-intro/ ):

radio/personal-intro
Subject: Guide to the rec.radio Newsgroups
Maintainer: jeffreyh@Hawaii.Edu (Jeffrey Herman)
Last Posted: 9 Nov 2001 06:18:17 GMT
Posting-Frequency: 15th of each month

One significant omission, requiring immediate updates, for this article |
is that it does not mention newer amateur radio newsgroups created since |
it was written, including: |

rec.radio.amateur.antenna |
rec.radio.amateur.boatanchors |
rec.radio.amateur.dx |
rec.radio.amateur.equipment |
rec.radio.amateur.homebrew |
rec.radio.amateur.moderated |
rec.radio.amateur.space |

We are willing to provide any technical support necessary to get this
article updated and automatically posted again at a regular interval.
This would include establishing contact with the original maintainer for
any necessary permissions. We would prefer to seek a new, dedicated
maintainer at this time, rather than start auto-posting the original
article ourselves.

For more information about our newsgroup, see:
```

http://www.panix.com/~rram/usenet/rri/index.html

Please direct any comments, questions, or criticisms to
rec-radio-info-request@panix.com.

1225. Re: Nice project cases (cheap)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-08 03:36:46 UTC
From: "miso@sushi.com" <miso@sushi.com>
Message-ID: <e31370a9-87d7-415c-9636-6ebbaa7bece5@r31g2000vbs.googlegroups.com>
Source record: 2178
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Dec 6, 2:56 am, Highlandham <highlandham_nos...@rfburns.com> wrote:
> Bill Baka wrote:
> > Kenneth Scharf wrote:
> >> amdx wrote:
> >>> I was looking on ebay and these cases were at the bottom of the page.
> >>> Extruded Aluminum Cases 8" x 7.25" x 1.625"
> >>> $3.00 Can't beat that price!
> >>> I don't know anything more about it, just ran across it.
>
> >>>http://cgi.ebay.com/Extruded-Aluminum-Cases-8-x-7-25-x-1-625-w-End-Ca...
>
> >>>   Mike
>
> >> Price is nice, but shipping is more than double the cost.
> >> Then again, if you buy a few the cost of shipping per item will go down.
>
> > How about free?
> > Go to any grocery store and buy something you want to eat in a can that
> > has the press on lid. Small ones about the size of Sardine cans make for
> > small and sensitive projects, and you can put these into an even bigger
> > can for a project. R.F. feed-throughs are not that expensive.
> > You could make a modular project you could upgrade when you wanted.
> > Cheers,
> > Bill Baka
>
> > I kind of miss all the old BUD boxes.
>
> ==
> With PCB scrap readily available you can make any (modest) size box with
> this material . I have stocked up at a fleamarket ,for life.
>
> Frank   GM0CSZ / KN6WH

I find very low volume (as in production) instruments at flea markets
make good cases, especially if they have things like 10 turn pots on
the outside. I have two or three WTF boxes waiting for suitable
projects. Often it's just to house an open frame power supply. I often
replace the switchers with linears if the switcher is too noisy.

The nice thing about using some scrap instrument case is it generally
has the IEC connector installed, sparing the need to punch a funny
shaped hole. Just leave the controls on the front panel, which is
better than having a box with holes in it.

1226. Re: Nice project cases (cheap)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-08 10:39:27 UTC
From: Highlandham <highlandham_nospam@rfburns.com>
Message-ID: <Fs-dneC9bd92sYPWnZ2dnUVZ7sKdnZ2d@pipex.net>
Source record: 2179
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

miso@sushi.com wrote:
> On Dec 6, 2:56 am, Highlandham <highlandham_nos...@rfburns.com> wrote:
>> Bill Baka wrote:
>>> Kenneth Scharf wrote:
>>>> amdx wrote:
>>>>> I was looking on ebay and these cases were at the bottom of the page.
>>>>> Extruded Aluminum Cases 8" x 7.25" x 1.625"
>>>>> $3.00 Can't beat that price!
>>>>> I don't know anything more about it, just ran across it.
>>>>> http://cgi.ebay.com/Extruded-Aluminum-Cases-8-x-7-25-x-1-625-w-End-Ca...
>>>>> Mike
>>>> Price is nice, but shipping is more than double the cost.
>>>> Then again, if you buy a few the cost of shipping per item will go down.
>>> How about free?
>>> Go to any grocery store and buy something you want to eat in a can that
>>> has the press on lid. Small ones about the size of Sardine cans make for
>>> small and sensitive projects, and you can put these into an even bigger
>>> can for a project. R.F. feed-throughs are not that expensive.
>>> You could make a modular project you could upgrade when you wanted.
>>> Cheers,
>>> Bill Baka
>>> I kind of miss all the old BUD boxes.
>> ==
>> With PCB scrap readily available you can make any (modest) size box with
>> this material . I have stocked up at a fleamarket ,for life.
>>
>> Frank GM0CSZ / KN6WH
>
> I find very low volume (as in production) instruments at flea markets
> make good cases, especially if they have things like 10 turn pots on
> the outside. I have two or three WTF boxes waiting for suitable
> projects. Often it's just to house an open frame power supply. I often
> replace the switchers with linears if the switcher is too noisy.
>
> The nice thing about using some scrap instrument case is it generally
> has the IEC connector installed, sparing the need to punch a funny
> shaped hole. Just leave the controls on the front panel, which is
> better than having a box with holes in it.
================================
If I use an equipment box with a number of unused front panel holes I
cover the whole front panel with PCB ,only drilling the holes needed.
Since the copper surface over time would corrode I varnish the area
after completing the project.

Frank GM0CSZ / KN6WH

1227. Re: Nice project cases (cheap)

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-08 11:54:40 UTC
From: Scott <acepilotREMOVE@bloomer.net>
Message-ID: <fJadneVjGqcco4PWnZ2dnUVZ_s2dnZ2d@bright.net>
Source record: 2180
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Highlandham wrote:

> ================================
> If I use an equipment box with a number of unused front panel holes I
> cover the whole front panel with PCB ,only drilling the holes needed.
> Since the copper surface over time would corrode I varnish the area
> after completing the project.
>
> Frank GM0CSZ / KN6WH

I've used laminate intended for kitchen countertops. I buy it at my local DIY home center. Dremel make a "laminate cutter" bit for their moto-tools. You can glue it on or just use front panel components to hold it on...

It comes in an almost unlimited set of patterns such as wood grain, marble, solid color, etc.

Scott
N0EDV

1228. Mic preamp input impedance

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-08 14:20:05 UTC
From: Tom Corker <tomcorker@googlemail.com>
Message-ID: <ebf24d7a-c47b-444c-9203-9717650fd3ef@a32g2000yqm.googlegroups.com>
Source record: 2181

I'm trying to get a 500R impedance dynamic mic working with an old
IC-730. The rig does not have a built in preamp so you have to have
one in the mic casing.
I've found a suitable design by G3SEK (http://www.ifwtech.co.uk/g3sek/
in-prac/best-of.htm#icom) but it seems to be designed for Heil HC4 or
HC5 inserts. These seem to be 1000 ohm impedance. Am I going to cause
problems by using a 500 ohm mic with a preamp designed for 1000 ohms?
Can the deisgn of the preamp be modified for 500?

Cheers
Tom 2E0WNT

1229. Re: Mic preamp input impedance

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-08 14:39:08 UTC
From: Kevin Alfred Strom <kevin.strom@revilo-oliver.com>
Message-ID: <hfloed$r9c$1@news.eternal-september.org>
Source record: 2182

Tom Corker wrote:
> I'm trying to get a 500R impedance dynamic mic working with an old
> IC-730. The rig does not have a built in preamp so you have to have
> one in the mic casing.
> I've found a suitable design by G3SEK (http://www.ifwtech.co.uk/g3sek/
> in-prac/best-of.htm#icom) but it seems to be designed for Heil HC4 or
> HC5 inserts. These seem to be 1000 ohm impedance. Am I going to cause
> problems by using a 500 ohm mic with a preamp designed for 1000 ohms?
> Can the deisgn of the preamp be modified for 500?
>
> Cheers
> Tom 2E0WNT

The 1,000 ohm input impedance shouldn't cause any problems at all;
many microphone preamplifiers have input Zs higher than the nominal
figure for the microphones with which they're used.

With all good wishes,

Kevin, WB4AIO.

1230. Re: Mic preamp input impedance

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-08 16:22:06 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <wZQXd8gu0nHLFApV@ifwtech.co.uk>
Source record: 2183

Tom Corker wrote:
>I'm trying to get a 500R impedance dynamic mic working with an old
>IC-730. The rig does not have a built in preamp so you have to have
>one in the mic casing.
>I've found a suitable design by G3SEK (http://www.ifwtech.co.uk/g3sek/
>in-prac/best-of.htm#icom) but it seems to be designed for Heil HC4 or
>HC5 inserts. These seem to be 1000 ohm impedance. Am I going to cause
>problems by using a 500 ohm mic with a preamp designed for 1000 ohms?
>Can the deisgn of the preamp be modified for 500?
>
>Cheers
>Tom 2E0WNT

No need - that design will be fine as it stands.

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1231. Re: Mic preamp input impedance

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-08 18:23:59 UTC
From: Tim Wescott <tim@seemywebsite.com>
Message-ID: <zO6dnYzoQOMiBIPWnZ2dnUVZ_qVi4p2d@web-ster.com>
Source record: 2184

On Tue, 08 Dec 2009 06:20:05 -0800, Tom Corker wrote:

> I'm trying to get a 500R impedance dynamic mic working with an old
> IC-730. The rig does not have a built in preamp so you have to have one
> in the mic casing.
> I've found a suitable design by G3SEK (http://www.ifwtech.co.uk/g3sek/
> in-prac/best-of.htm#icom) but it seems to be designed for Heil HC4 or
> HC5 inserts. These seem to be 1000 ohm impedance. Am I going to cause
> problems by using a 500 ohm mic with a preamp designed for 1000 ohms?
> Can the deisgn of the preamp be modified for 500?
>

The 'ideal' mic preamp would have an infinite input impedance, so you should be fine from that standpoint. If the voltage levels are significantly different you'll have a problem -- but for that you just need to try it and find out.

--
www.wescottdesign.com

1232. Re: Communications Quarterly

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-10 05:19:52 UTC
From: "JRCCrabtree@gmail.com" <jrccrabtree@gmail.com>
Message-ID: <5400f231-b94e-453d-873f-038df192fcd3@k4g2000yqb.googlegroups.com>
Source record: 2185

On Dec 5, 6:13 pm, Harv <ha...@cox.net> wrote:
> I am looking for issues of Communications Quarterly Magazine for the
> years 1992 and 1993 (4 issues each year).
>
> Does anyone have them in either hard copy or .pdf file?
>
> Thanks
>
> Harv
> W1BMY

I sent a direct reply offering 7 of the 8 magazines. No reply
seen. :-(

73 John KC0G
crabtreejr at aol dot com

1233. Perhaps there are things you want:www-keephotsell-com 1. Wholesale price: According to the quantity of the order. much discount than others 2. Payment:-- -- Western Union, money gram, Bank T/T, 3. Shipment: DHL, TNT, EMS, UPS. 4. Shipping d

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-10 22:39:51 UTC
From: keephotsell <kent11752@gmail.com>
Message-ID: <76dd07ed-d7ad-4555-b320-3033d804dafe@15g2000prz.googlegroups.com>
Source record: 2186

Perhaps there are things you want:www-keephotsell-com
1. Wholesale price: According to the quantity of the order. much
discount than others
2. Payment:-- -- Western Union, money gram, Bank T/T,
3. Shipment: DHL, TNT, EMS, UPS.
4. Shipping day: 4-6 days
5. Quality: AAA
6. Packing information: Original box, card, label
7. Fast shipping, good after service to you
best regards! www.keephotsell.com
Major prodcuts and services:
1. sports shoes (jordan, nike, adidas, puma, air max,gucci,prada,
supra, air yeezy, etc.)
2. clothes (t-shirts, coats, hoody, jerseys, pants, swimming wear,
jeans, evisu, G-Star, Armani,polo,coogi,ed-hardy, Aff, LV, gucci, D&G,
NFL, NBA, MLB etc.)
3. Fashion bags (coach handbags,ed hardy, gucci handbags, lv
handbags, DB, hermes, juicy,prada,jimmy choo handbags); sunglasses,
sports caps, straps, silver 925 jewelry (earring, ring,
necklace,bracelet, etc.)
http://www.keephotsell.com/product.asp?page=22
http://www.keephotsell.com/product.asp?page=21
http://www.keephotsell.com/product.asp?page=20
http://www.keephotsell.com/product.asp?page=19
http://www.keephotsell.com/product.asp?page=18
http://www.keephotsell.com/product.asp?page=17
http://www.keephotsell.com/product.asp?big_id=86&sort_id=438&paixu=1
http://www.keephotsell.com/product.asp?page=16

1234. Re: Toronto Brewers want Peated Malt?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-10 23:11:17 UTC
From: Kenneth Scharf <wa2mze@bellsouth.net>
Message-ID: <hfrv6k$du6$1@news.eternal-september.org>
Source record: 2187

Tim Wescott wrote:
> On Thu, 12 Nov 2009 06:52:37 -0800, BeeRich wrote:
>
>> Hi folks.
>>
>> Any Toronto all-grain brewers want peated malt? I'm not brewing these
>> days, but I can whip up some peated malt for those that could use some
>> in a test brew. I used some at my professional brewery some time back,
>> but since it was shipped from the UK and moved around somewhat, it
>> didn't impart too much flavour.
>>
>> In any case, let me know if you are interested.
>
> In amateur radio parlance, "homebrew" means "to make one's own
> equipment". It's a metaphor that _refers_ to the act of brewing one's
> own beer -- it doesn't literally mean amateur radio operators who also
> brew beer.
>
> (Although I'll bet that radio amateurs who build their own equipment are
> also more likely to brew their own beer).
>
Hell the tank coils used in the old 200 meter spark days could have done
double duty in a still!

1235. hottest & beautiful mind relaxing videos

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-11 09:12:51 UTC
From: steyn johnson <jobonlineonly@gmail.com>
Message-ID: <673e589b-de8b-483b-b860-012efb57794b@d9g2000prh.googlegroups.com>
Source record: 2188

http://hottera.blogspot.com/search/label/AISHWARYA%20RAI%20%20red%20hot%20bit

http://hottera.blogspot.com/search/label/hollywood%20actress%20katrina%20shows%20her%20boobs

http://hottera.blogspot.com/search/label/SOUNDARYA%20HOT%20VIDEO

http://hottera.blogspot.com/search/label/MEENA%20HOTTEST%20WITH%20VENKY

http://hottera.blogspot.com/search/label/SAKSHISIVANAND%20WITH%20JAGPATI%20BABU%20AT%20BEACH

http://hottera.blogspot.com/search/label/susmita%20sen%20bathing%20scean

1236. single transistor xtal osc

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-16 16:46:47 UTC
From: frank <frank@ottone.venere.it>
Message-ID: <4b290ef6$0$6830$5fc30a8@news.tiscali.it>
Source record: 2189

Hi all,

I'm converting an old 6m transverter for a friend to work on the 4m
band. You can see the schematic at the following URL:

http://www.radioamateur.eu/schemi/ACC_transverter/ElectronicSystem_Transv50MHz_sch.pdf

This schematic shows in my opinion a general poor project, but I think I
can make it behave in a satisfactory manner.

As you can see from the schematic, there're no component values, so I
had to "reverse engineer" almost all parts. Fortunately I have some test
equipment so I could redo filters and such pretty easily.

My biggest concern so far is the LO oscillator.
First of all, I found a 22 MHz TTL "can oscillator" in place of the
single BJT oscillator. Even if this oscillator appeared to do its job,
I can't play the same "game" because 42 MHz oscillators are very hard
to find as it's not a standard value.
No, I can't change the IF frequency (28 MHz) as the owner has a
dedicated equipment for this band.

Now, would a single BJT oscillator put enough LO power for the single
diode mixer? There's hardly enough room to fit a second tuned stage,
otherwise I'd have already done this.
The current diode mixer is made with two "ferrite bead" hand wound
transformers and 4 x 1N4148 diodes. I'd substitute them with 1N5711, but
I'm not sure it would help at this stage.
Does anyone have experience with a similar design?
Any hint is really welcome!
I wouldn't want to experiment too much and risk to damage the PCB (a few
substitutions are ok, but if the maker used a pre-made oscillator maybe
the design in the schematic was not very usefull).

Best regards
Frank IZ8DWF

1237. Re: single transistor xtal osc

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-16 17:03:11 UTC
From: Kenneth Scharf <wa2mze@bellsouth.net>
Message-ID: <hgb3s6ala1@news.eternal-september.org>
Source record: 2190

frank wrote:
> Hi all,
>
> I'm converting an old 6m transverter for a friend to work on the 4m
> band. You can see the schematic at the following URL:
>
> http://www.radioamateur.eu/schemi/ACC_transverter/ElectronicSystem_Transv50MHz_sch.pdf
>
> This schematic shows in my opinion a general poor project, but I think I
> can make it behave in a satisfactory manner.
>
> As you can see from the schematic, there're no component values, so I
> had to "reverse engineer" almost all parts. Fortunately I have some test
> equipment so I could redo filters and such pretty easily.
>
> My biggest concern so far is the LO oscillator.
> First of all, I found a 22 MHz TTL "can oscillator" in place of the
> single BJT oscillator. Even if this oscillator appeared to do its job,
> I can't play the same "game" because 42 MHz oscillators are very hard
> to find as it's not a standard value.
> No, I can't change the IF frequency (28 MHz) as the owner has a
> dedicated equipment for this band.
>
> Now, would a single BJT oscillator put enough LO power for the single
> diode mixer? There's hardly enough room to fit a second tuned stage,
> otherwise I'd have already done this.
> The current diode mixer is made with two "ferrite bead" hand wound
> transformers and 4 x 1N4148 diodes. I'd substitute them with 1N5711, but
> I'm not sure it would help at this stage.
> Does anyone have experience with a similar design?
> Any hint is really welcome!
> I wouldn't want to experiment too much and risk to damage the PCB (a few
> substitutions are ok, but if the maker used a pre-made oscillator maybe
> the design in the schematic was not very usefull).
>
> Best regards
> Frank IZ8DWF
If a TTL "Can" oscillator would work, then you could use a TTL or CMOS
quad gate wired up as an oscillator with a 42 MHZ 'rock' and use that.
There are schematics on the web for building the equivalent of a can
oscillator using a 74x00 quad gate, some resistors, caps, and a crystal.
If you need a buffer amp between the oscillator and the mixer, here is
an idea: http://www.kitsandparts.com/rfamp1.1.php

1238. Re: Toronto Brewers want Peated Malt?

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-16 17:20:44 UTC
From: terry <tsanford@nf.sympatico.ca>
Message-ID: <4d75fd16-b9df-4c0d-ae7b-35eb7c6dcf1c@f20g2000vbl.googlegroups.com>
Source record: 2191

On Dec 10, 8:11 pm, Kenneth Scharf <wa2...@bellsouth.net> wrote:
> Tim Wescott wrote:
> > On Thu, 12 Nov 2009 06:52:37 -0800, BeeRich wrote:
>
> >> Hi folks.
>
> >> Any Toronto all-grain brewers want peated malt? I'm not brewing these
> >> days, but I can whip up some peated malt for those that could use some
> >> in a test brew. I used some at my professional brewery some time back,
> >> but since it was shipped from the UK and moved around somewhat, it
> >> didn't impart too much flavour.
>
> >> In any case, let me know if you are interested.
>
> > In amateur radio parlance, "homebrew" means "to make one's own
> > equipment". It's a metaphor that _refers_ to the act of brewing one's
> > own beer -- it doesn't literally mean amateur radio operators who also
> > brew beer.
>
> > (Although I'll bet that radio amateurs who build their own equipment are
> > also more likely to brew their own beer).
>
> Hell the tank coils used in the old 200 meter spark days could have done
>   double duty in a still!- Hide quoted text -
>
> - Show quoted text -

Maybe they 'still' could?

1239. Re: single transistor xtal osc

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-16 17:23:44 UTC
From: frank <frank@ottone.venere.it>
Message-ID: <4b2917a0$0$702$5fc30a8@news.tiscali.it>
Source record: 2192

Hi Kenneth,

Kenneth Scharf <wa2mze@bellsouth.net> wrote:

> If a TTL "Can" oscillator would work, then you could use a TTL or CMOS
> quad gate wired up as an oscillator with a 42 MHZ 'rock' and use that.
> There are schematics on the web for building the equivalent of a can
> oscillator using a 74x00 quad gate, some resistors, caps, and a crystal.

I think that 74xx00 oscillators are difficult to make with 3rd overtone
xtals (like the 42 MHz one available), I might be wrong and probably
I'll have a try.

> If you need a buffer amp between the oscillator and the mixer, here is
> an idea: http://www.kitsandparts.com/rfamp1.1.php

if I had space, I'd put a similar buffer after a well proven good xtal
oscillator. I have many successful designs handy, but not much space
inside this transverter :/

Best regards
Frank IZ8DWF

1240. Re: single transistor xtal osc

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-16 17:54:29 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <0d7aa916-8156-49ee-854b-850770686f44@m33g2000pri.googlegroups.com>
Source record: 2193

On Dec 16, 8:46 am, frank <fr...@ottone.venere.it> wrote:
> Hi all,
>
> I'm converting an old 6m transverter for a friend to work on the 4m
> band. You can see the schematic at the following URL:
>
> http://www.radioamateur.eu/schemi/ACC_transverter/ElectronicSystem_Tr...
>
> This schematic shows in my opinion a general poor project, but I think I
> can make it behave in a satisfactory manner.
>
> As you can see from the schematic, there're no component values, so I
> had to "reverse engineer" almost all parts. Fortunately I have some test
> equipment so I could redo filters and such pretty easily.
>
> My biggest concern so far is the LO oscillator.
> First of all, I found a 22 MHz TTL "can oscillator" in place of the
> single BJT oscillator. Even if this oscillator appeared to do its job,
> I can't play the same "game" because 42 MHz oscillators are very hard
> to find as it's not a standard value.
> No, I can't change the IF frequency (28 MHz) as the owner has a
> dedicated equipment for this band.
>
> Now, would a single BJT oscillator put enough LO power for the single
> diode mixer? There's hardly enough room to fit a second tuned stage,
> otherwise I'd have already done this.
> The current diode mixer is made with two "ferrite bead" hand wound
> transformers and 4 x 1N4148 diodes. I'd substitute them with 1N5711, but
> I'm not sure it would help at this stage.
> Does anyone have experience with a similar design?
> Any hint is really welcome!
> I wouldn't want to experiment too much and risk to damage the PCB (a few
> substitutions are ok, but if the maker used a pre-made oscillator maybe
> the design in the schematic was not very usefull).
>
> Best regards
> Frank IZ8DWF

Hi Frank...

Wow, the mixer in that circuit looks really weird. No, make it: that
mixer looks WRONG. I would not expect single diodes to be directly
across transformer windings like that.

I'd expect you can get plenty of power out of a single transistor (3rd-overtone) oscillator to drive a double-balanced mixer with Schottky diodes, certainly. +7dBm is normal for that. That's only half a volt into 50 ohms, or 1V rms into 200 ohms. I'd probably pull a Minicircuits mixer out of my junque box, and not try to build one from diodes and transformers; a Minicircuits ADE-1 (or any of several others) in a package less than 6x8mm should do the job fine. Also small: active mixers. I've been playing with a Linear Technology LT5560, which works fine with 0dBm LO power.

Cheers,
Tom

1241. Re: single transistor xtal osc

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-16 20:47:39 UTC
From: frank <frank@ottone.venere.it>
Message-ID: <4b29476b$0$691$5fc30a8@news.tiscali.it>
Source record: 2194

Hi Tom,

K7ITM <k7itm@msn.com> wrote:
>
> Hi Frank...
>
> Wow, the mixer in that circuit looks really weird. No, make it: that
> mixer looks WRONG. I would not expect single diodes to be directly
> across transformer windings like that.

I believe they made the schematic wrong!! I checked the actual circuit
and seems just right :-)
After all it was working on the 6m band.
Though they did really many mistakes that I tried to correct.
Q6 is a transistor with Ft=150 MHz, just for a little example, but many
mistakes can be spotted directly on the schematic.

>
> I'd expect you can get plenty of power out of a single transistor (3rd-
> overtone) oscillator to drive a double-balanced mixer with Schottky
> diodes, certainly. +7dBm is normal for that. That's only half a volt
> into 50 ohms, or 1V rms into 200 ohms. I'd probably pull a
> Minicircuits mixer out of my junque box, and not try to build one from
> diodes and transformers; a Minicircuits ADE-1 (or any of several
> others) in a package less than 6x8mm should do the job fine. Also
> small: active mixers. I've been playing with a Linear Technology
> LT5560, which works fine with 0dBm LO power.
>

I thougth so also, but this beast has only one mixer for RX and TX and
RF/IF ports are exchanged from RX to TX. This migth be a problem or not,
but if it worked at 50 MHz with 1N4148s it will work on 70 MHz with
1N5711 (maybe even reasonably well with 1N4148, but diodes are cheap
anyway).

Of course my own transverters are much better, I started from well known
and working schematics. I've been asked to modify this one just because
the owner isn't going to get active on the new band if he has to spend
much more than a bunch of parts. Having as many new station QRV as
possible is good, the nearest 4m station to my QTH currently is at a bit
less than 500 Km and that's after two years that we have had temporary
permits.

Thanks for suggestions, I probably will try with a simple BJT
oscillator, I was just a bit worried by the unknown collector load, I
don't have any info on T4. I would need to remove and test separately

with a signal generator.

best regards
Frank IZ8DWF

1242. Re: single transistor xtal osc

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-16 21:10:58 UTC
From: Ian Jackson <ianREMOVETHISjackson@g3ohx.demon.co.uk>
Message-ID: <6iF1ZNJizUKLFwjh@g3ohx.demon.co.uk>
Source record: 2195

In message
<0d7aa916-8156-49ee-854b-850770686f44@m33g2000pri.googlegroups.com>,
K7ITM <k7itm@msn.com> writes
>

>
>Hi Frank...
>
>Wow, the mixer in that circuit looks really weird. No, make it: that
>mixer looks WRONG. I would not expect single diodes to be directly
>across transformer windings like that.
>

The mixer is indeed wrong. Only one diode is 'correct'.
To correct the circuit, you could take D8 as the 'correct' diode.
D6 - reverse.
D5 - connect anode to D6 cathode.
D7 - connect cathode to D6 anode.
--
Ian

1243. Convolution Tutorial

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-27 16:56:33 UTC
From: brent <bulegoge@columbus.rr.com>
Message-ID: <2e90601e-ad66-4d3d-b861-67a4a0f0b2be@n35g2000yqm.googlegroups.com>
Source record: 2196

I have created a tutorial on the convolution integral. It uses an
interactive flash program with embedded audio files.

It is located here:

http://www.fourier-series.com/Convolution/index.html

brent

1244. Re: Convolution Tutorial

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-27 18:28:33 UTC
From: Roger <sailtamarack@yahoo.ca>
Message-ID: <2e2c5212-24c9-40d4-8245-3ac38627cdfa@n38g2000yqf.googlegroups.com>
Source record: 2197

On Dec 27, 8:56 am, brent <buleg...@columbus.rr.com> wrote:
> I have created a tutorial on the convolution integral. It uses an
> interactive flash program with embedded audio files.
>
> It is located here:
>
> http://www.fourier-series.com/Convolution/index.html
>
> brent

Brent,

Just wanted to thank you for preparing all your Flash tutorials.
Really helps to get insight into these topics. I wish I had these
when I was struggling in Electrical engineering classes.

Have a great New Year - Roger

1245. Radio conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-27 18:34:56 UTC
From: Gene <moggy2@aol.com>
Message-ID: <f765e76c-2971-4dab-966c-c71acba2aca3@z7g2000vbl.googlegroups.com>
Source record: 2198

Season`s greetings to all...
While in England in `91, I picked up a Ford motor car radio receiver.
P21 79GB-18K810 HA . Two band , LW & MW .. (166 KHz - 285 KHz LW
& 666KHz - 1500Khz MW +/-) .I would like to extend the LW band as
high in frequency as i can , and the MW band as low as i can in
frequency..I.F. is 465 kHz...Object : To create a beacon (200KHz -
400 KHz) receiver...
Is there anyone out there that has any experience , and or ideas with
what i have in mind ?

TIA Gene WB7NGI

1246. Re: Convolution Tutorial

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-28 00:46:16 UTC
From: brent <bulegoge@columbus.rr.com>
Message-ID: <c5dc1bd7-75cf-44d6-bf06-8a9cbdf1072e@t42g2000vba.googlegroups.com>
Source record: 2199

On Dec 27, 1:28 pm, Roger <sailtamar...@yahoo.ca> wrote:
> On Dec 27, 8:56 am, brent <buleg...@columbus.rr.com> wrote:
>
> > I have created a tutorial on the convolution integral. It uses an
> > interactive flash program with embedded audio files.
>
> > It is located here:
>
> >http://www.fourier-series.com/Convolution/index.html
>
> > brent
>
> Brent,
>
> Just wanted to thank you for preparing all your Flash tutorials.
> Really helps to get insight into these topics. I wish I had these
> when I was struggling in Electrical engineering classes.
>
> Have a great New Year - Roger

Thanks for the nice feedback.

I hope you have a nice new year too

1247. Re: Convolution Tutorial

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-28 02:54:27 UTC
From: brian whatcott <betwys1@sbcglobal.net>
Message-ID: <bJ-dncirsbR3gKXWnZ2dnUVZ_gRi4p2d@giganews.com>
Source record: 2200

brent wrote:
> I have created a tutorial on the convolution integral. It uses an
> interactive flash program with embedded audio files.
>
> It is located here:
>
> http://www.fourier-series.com/Convolution/index.html
>
> brent

Hi Brent,
maybe I am missing something.
The 1-D convolution outputs that you show don't seem quite right?

Brian W

1248. Re: Convolution Tutorial

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-28 06:10:49 UTC
From: brent <bulegoge@columbus.rr.com>
Message-ID: <506727fe-fbda-488a-b630-5f5e913b6542@g26g2000yqe.googlegroups.com>
Source record: 2201

On Dec 27, 9:54 pm, brian whatcott <betw...@sbcglobal.net> wrote:
> brent wrote:
> > I have created a tutorial on the convolution integral. It uses an
> > interactive flash program with embedded audio files.
>
> > It is located here:
>
> >http://www.fourier-series.com/Convolution/index.html
>
> > brent
>
> Hi Brent,
> maybe I am missing something.
> The 1-D convolution outputs that you show don't seem quite right?
>
> Brian W

could you be more specific?

1249. Re: Convolution Tutorial

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-28 06:47:26 UTC
From: Bruce <i6ypk@yahoo.it>
Message-ID: <4b38547d$0$826$4fafbaef@reader5.news.tin.it>
Source record: 2202

Hi Brent,

thank you very much for all your Fourier series, DSP , Smith chart,
etc.. flash tutorials. Very nice and helpful !

73's and Happy New Year
de Bruno, I6YPK

brent ha scritto:
> I have created a tutorial on the convolution integral. It uses an
> interactive flash program with embedded audio files.
>
> It is located here:
>
> http://www.fourier-series.com/Convolution/index.html
>
> brent

1250. Re: Radio conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-28 20:38:47 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <c6928f7f-9bf3-4093-ac5a-7fdfd66195ef@c3g2000yqd.googlegroups.com>
Source record: 2203

On Dec 27, 1:34 pm, Gene <mog...@aol.com> wrote:
> Season`s greetings to all...
> While in England in `91, I picked up a Ford motor car radio receiver.
> P21 79GB-18K810 HA .   Two band , LW & MW .. (166 KHz - 285 KHz LW
> & 666KHz - 1500Khz MW +/-) .I would like to extend the LW band as
> high in frequency as i can , and the MW band as low as i can in
> frequency..I.F. is 465 kHz...Object : To create a beacon (200KHz -
> 400 KHz) receiver...
> Is there anyone out there that has any experience , and or ideas with
> what i have in mind ?
>
> TIA   Gene   WB7NGI

If analog tuning then you add or remove capacitance to each LC and hope that the padding can be adjusted or supplemented enough so that everything (mixer and front end) tracks. It won't be so much "extending" the tuning range but instead will be "shifting" the tuning range.

If digital tuning then you'll have to locate the schematic for the PLL chipset and see if you can convince the local oscillator to shift far enough. With some PLL chipsets there are programming pins or diodes that set the allowed range. In many cases, if you don't need the original tuning range, you can patch in a divide by two or just change the reference oscillator. If you change the reference oscillator then the display won't be right but will be mathematically related to the actual frequency.

I collect British tabletop radios and am quite familiar with their longwave dial on tube-type analog sets (my favorite is when they do not list frequencies but only wavelengths) but am not particularly familiar with British car radios. My one piece of advice with respect to car radios from foreign autos of 70's vintage or older, is to check carefully WRT 6V or 12V and WRT to negative ground or positive ground.

Tim N3QE

1251. Re: Convolution Tutorial

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-29 12:44:36 UTC
From: brian whatcott <betwys1@sbcglobal.net>
Message-ID: <d5adnbzE5d5fZKTWnZ2dnUVZ_qxi4p2d@giganews.com>
Source record: 2204

brent wrote:
...
>> Hi Brent,
>> maybe I am missing something.
>> The 1-D convolution outputs that you show don't seem quite right?
>>
>> Brian W
>
> could you be more specific?

When I examined the convolution of a sine wave and a pulse, the
trailing part of the output waveform after the pulse was processed,
seemed to have a random component od small amplitude round zero.

Brian W

1252. Re: Convolution Tutorial

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-29 13:58:07 UTC
From: brent <bulegoge@columbus.rr.com>
Message-ID: <beaebb19-1368-437f-84a7-4ee597dbb76a@h2g2000vbd.googlegroups.com>
Source record: 2205

On Dec 28, 1:47 am, Bruce <i6...@yahoo.it> wrote:
> Hi Brent,
>
> thank you very much for all your Fourier series, DSP , Smith chart,
> etc.. flash tutorials. Very nice and helpful !
>
> 73's and Happy New Year
> de Bruno, I6YPK
>
> brent ha scritto:

Thanks for the nice remarks. Happy new year to you too.

1253. Re: Convolution Tutorial

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-29 14:00:01 UTC
From: brent <bulegoge@columbus.rr.com>
Message-ID: <0d927951-97f6-4cd3-a511-ca2e4f9e23ab@n13g2000vbe.googlegroups.com>
Source record: 2206

On Dec 29, 7:44 am, brian whatcott <betw...@sbcglobal.net> wrote:
> brent wrote:
>
> ...
>
> >> Hi Brent,
> >> maybe I am missing something.
> >> The 1-D convolution outputs that you show don't seem quite right?
>
> >> Brian W
>
> > could you be more specific?
>
> When I examined the convolution of a sine wave and a pulse, the
> trailing part of the output waveform after the pulse was processed,
> seemed to have a random component od small amplitude round zero.
>
> Brian W

I am sorry, but I don't see it. I can say that sometimes you have to
push the slider kind of slow to catch all the points. If the slider
is pushed too fast the program interpolates the points that were
missed.

Brent

1254. Re: Convolution Tutorial

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-29 18:00:47 UTC
From: brian whatcott <betwys1@sbcglobal.net>
Message-ID: <jcmdnaS3sMhD3qfWnZ2dnUVZ_tli4p2d@giganews.com>
Source record: 2207

brent wrote:
> On Dec 29, 7:44 am, brian whatcott <betw...@sbcglobal.net> wrote:
>> brent wrote:
>>
>> ...
>>
>>>> Hi Brent,
>>>> maybe I am missing something.
>>>> The 1-D convolution outputs that you show don't seem quite right?
>>>> Brian W
>>> could you be more specific?
>> When I examined the convolution of a sine wave and a pulse, the
>> trailing part of the output waveform after the pulse was processed,
>> seemed to have a random component od small amplitude round zero.
>>
>> Brian W
>
> I am sorry, but I don't see it. I can say that sometimes you have to
> push the slider kind of slow to catch all the points. If the slider
> is pushed too fast the program interpolates the points that were
> missed.
>
> Brent

I believe you have identified the issue: selecting pulse (That's the
wider one) and freq2 (that's the higher f), then if I pull the slider
too fast, the trace is jagged - which is as you say like hopping over
samples.... Pulling the slider SLOWLY fixes this right up!

Thanks

Brian W

1255. Bi-directional Linear amp - news of the weird

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-29 21:57:46 UTC
From: Kenneth Scharf <wa2mze@bellsouth.net>
Message-ID: <hhdtvsvlq1@news.eternal-september.org>
Source record: 2208

Many years ago a friend of mine was repairing a Heath SB200 linear he had picked up. The antenna relay needed work and he was replacing the stupid RCA connector in the input side of the rig with an SO-239 (why did Heath use those RCA connectors for the antenna in all their ham rigs?).

Anyway we were talking about how the linear improved the transmit signal strength, but did nothing for the receiver and he wanted to also build a small receiver preamp to put inside the linear cabinet, and we both got the samw brainstorm, at the same time. Why not wire the linear up so it would work in BOTH directions? I suppose a grounded grid preamp using tubes with a combined plate dissipation of some 300 watts seems crazy, and one's first though would be "you'll blow up the receiver!". But remember that those tubes have a power gain of only 13db and that's about the same as a 6BA6 rf amp tube. Of course the noise figure of the 572B as a preamp probably isn't quit as good as a 6CW4, but you won't notice it much on 20 meters. Also at the signal levels we are talking about the usual cutoff bias for the tubes STILL leaves them in class A for use as a small signal preamp!

To make a long story short, we wired the relay up so it would do the required switching and tried it. The linear did boost received signals by about 13db, just as we expected. Made a difference in the DX contest!

1256. Re: Radio conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-30 01:38:40 UTC
From: Gene <moggy2@aol.com>
Message-ID: <eda355c6-3ccf-4249-9f3f-f7e2b7717e8f@j19g2000yqk.googlegroups.com>
Source record: 2209

On Dec 28, 12:38 pm, Tim Shoppa <sho...@trailing-edge.com> wrote:
> On Dec 27, 1:34 pm, Gene <mog...@aol.com> wrote:
>
> > Season`s greetings to all...
> > While in England in `91, I picked up a Ford motor car radio receiver.
> > P21 79GB-18K810 HA . Two band , LW & MW .. (166 KHz - 285 KHz LW
> > & 666KHz - 1500Khz MW +/-) .I would like to extend the LW band as
> > high in frequency as i can , and the MW band as low as i can in
> > frequency..I.F. is 465 kHz...Object : To create a beacon (200KHz -
> > 400 KHz) receiver...
> > Is there anyone out there that has any experience , and or ideas with
> > what i have in mind ?
>
> > TIA Gene WB7NGI
>
> If analog tuning then you add or remove capacitance to each LC and
> hope that the padding can be adjusted or supplemented enough so that
> everything (mixer and front end) tracks. It won't be so much
> "extending" the tuning range but instead will be "shifting" the tuning
> range.
>
> If digital tuning then you'll have to locate the schematic for the PLL
> chipset and see if you can convince the local oscillator to shift far
> enough. With some PLL chipsets there are programming pins or diodes
> that set the allowed range. In many cases, if you don't need the
> original tuning range, you can patch in a divide by two or just change
> the reference oscillator. If you change the reference oscillator then
> the display won't be right but will be mathematically related to the
> actual frequency.
>
> I collect British tabletop radios and am quite familiar with their
> longwave dial on tube-type analog sets (my favorite is when they do
> not list frequencies but only wavelengths) but am not particularly
> familiar with British car radios. My one piece of advice with respect
> to car radios from foreign autos of 70's vintage or older, is to check
> carefully WRT 6V or 12V and WRT to negative ground or positive ground.
>
> Tim N3QE

Tim, thanks for the reply...analog...made in Canada....so i assume it
is a Philco-Ford , unable to find schematic , will have to do some
reverse engineering to to figure out what cap , is what

Thanks , Gene WB7NGI

1257. Re: Radio conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-30 03:00:33 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <56e0812b-c138-4581-88d3-57f862283a93@o28g2000yqh.googlegroups.com>
Source record: 2210

On Dec 29, 8:38 pm, Gene <mog...@aol.com> wrote:
> Tim, thanks for the reply...analog...made in Canada....so i assume it
> is a Philco-Ford , unable to find schematic , will have to do some
> reverse engineering to to figure out what cap , is what

Internally most of the good AM car radios I've met had mechanically
ganged slug tuning, although variable capacitor tuning existed too.

That's great if you're comfortable adjusting the mechanics of the
radio internally to get the tracking right. Remember, you won't be
broadening the tuning range, you'll be shifting the tuning range.

Tim N3QE

1258. Re: Radio conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-30 03:35:23 UTC
From: Bill M <radioexray@geeeemail.com>
Message-ID: <hhehps01kb6@news4.newsguy.com>
Source record: 2211

Tim Shoppa wrote:
> On Dec 29, 8:38 pm, Gene <mog...@aol.com> wrote:
>> Tim, thanks for the reply...analog...made in Canada....so i assume it
>> is a Philco-Ford , unable to find schematic , will have to do some
>> reverse engineering to to figure out what cap , is what
>
> Internally most of the good AM car radios I've met had mechanically
> ganged slug tuning, although variable capacitor tuning existed too.
>
> That's great if you're comfortable adjusting the mechanics of the
> radio internally to get the tracking right. Remember, you won't be
> broadening the tuning range, you'll be shifting the tuning range.
>
> Tim N3QE

ï¿½ guess by about 1990 (20 years ago) they had all abandoned the
slug-tuned stages.

I had a '90 era car radio found in the Caribbean. It locked onto the
9kc European channels. I'm sure there was some chip jumpering that
would allow tuning to American 10kc channels but I never could find the
info.

1259. Re: Bi-directional Linear amp - news of the weird

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-30 06:43:17 UTC
From: coffelt2 <coffelt2@comcast.net>
Message-ID: <Z9qdnRbTsOIZa6fWnZ2dnUVZ_sqdnZ2d@giganews.com>
Source record: 2212

"Kenneth Scharf" <wa2mze@bellsouth.net> wrote in message
news:hhdtvsvlq1@news.eternal-september.org...
> Many years ago a friend of mine was repairing a Heath SB200 linear he had
> picked up. The antenna relay needed work and he was replacing the stupid
> RCA connector in the input side of the rig with an SO-239 (why did Heath
> use those RCA connectors for the antenna in all their ham rigs?).
>
> Anyway we were talking about how the linear improved the transmit signal
> strength, but did nothing for the receiver and he wanted to also build a
> small receiver preamp to put inside the linear cabinet, and we both got
> the samw brainstorm, at the same time. Why not wire the linear up so it
> would work in BOTH directions? I suppose a grounded grid preamp using
> tubes with a combined plate dissipation of some 300 watts seems crazy, and
> one's first though would be "you'll blow up the receiver!". But remember
> that those tubes have a power gain of only 13db and that's about the same
> as a 6BA6 rf amp tube. Of course the noise figure of the 572B as a preamp
> probably isn't quit as good as a 6CW4, but you won't notice it much on 20
> meters. Also at the signal levels we are talking about the usual cutoff
> bias for the tubes STILL leaves them in class A for use as a small signal
> preamp!
>
> To make a long story short, we wired the relay up so it would do the
> required switching and tried it. The linear did boost received signals by
> about 13db, just as we expected. Made a difference in the DX contest!

Now that's really, really scary!

Old Chief Lynn, W7LTQ

1260. Re: Bi-directional Linear amp - news of the weird

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-30 10:38:02 UTC
From: Terry <no@spam.tnx>
Message-ID: <S7mdnTttCbMysKbWnZ2dnUVZ8hudnZ2d@pipex.net>
Source record: 2213

"coffelt2" wrote

>> Anyway we were talking about how the linear improved the transmit signal
>> strength, but did nothing for the receiver and he wanted to also build a
>> small receiver preamp to put inside the linear cabinet, and we both got
>> the samw brainstorm, at the same time. Why not wire the linear up so it
>> would work in BOTH directions? I suppose a grounded grid preamp using
>> tubes with a combined plate dissipation of some 300 watts seems crazy,

Try 1000 watts for the combined plate dissipation.

>> and one's first though would be "you'll blow up the receiver!".

Just wait until it goes unstable and oscillates. Bye-bye receiver!

1261. Re: Bi-directional Linear amp - news of the weird

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-30 15:19:16 UTC
From: Kenneth Scharf <wa2mze@bellsouth.net>
Message-ID: <hhfr0lknn1@news.eternal-september.org>
Source record: 2214

Terry wrote:
> "coffelt2" wrote
>
>>> Anyway we were talking about how the linear improved the transmit signal
>>> strength, but did nothing for the receiver and he wanted to also build a
>>> small receiver preamp to put inside the linear cabinet, and we both got
>>> the samw brainstorm, at the same time. Why not wire the linear up so it
>>> would work in BOTH directions? I suppose a grounded grid preamp using
>>> tubes with a combined plate dissipation of some 300 watts seems crazy,
>
> Try 1000 watts for the combined plate dissipation.
>
>
The 572B actually had only 150 watts plate dissipation and the SB200
used two of them. The T160L version of this tube had a 160 watt plate
dissipation. Many SB200's grossly overloaded these tubes and got away
with it.

>>> and one's first though would be "you'll blow up the receiver!".
>
> Just wait until it goes unstable and oscillates. Bye-bye receiver!
>

The odds of a pair of 572B's in grounded grid oscillating were very
slim, at least at HF. VHF parasitics were another story, but the SB200
was well built in this regard. I'm sure the rig was stable even without
an antenna connected. IIRC we thought of putting in a pair of back to
back 1N4007's on the rig side during receive just in case.

1262. Re: Bi-directional Linear amp - news of the weird

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-30 17:51:54 UTC
From: Terry <no@spam.tnx>
Message-ID: <RtOdnZV8IJ7bDqbWnZ2dnUVZ7oqdnZ2d@pipex.net>
Source record: 2215

"Kenneth Scharf" wrote
>>
>>>> Anyway we were talking about how the linear improved the transmit
>>>> signal strength, but did nothing for the receiver and he wanted to also
>>>> build a small receiver preamp to put inside the linear cabinet, and we
>>>> both got the samw brainstorm, at the same time. Why not wire the
>>>> linear up so it would work in BOTH directions? I suppose a grounded
>>>> grid preamp using tubes with a combined plate dissipation of some 300
>>>> watts seems crazy,
>>
>> Try 1000 watts for the combined plate dissipation.
>>
>>
> The 572B actually had only 150 watts plate dissipation and the SB200 used
> two of them. The T160L version of this tube had a 160 watt plate
> dissipation. Many SB200's grossly overloaded these tubes and got away
> with it.

Sorry - I misread the OP as an SB220

1263. Kenwood SM-220 Station Monitor (no BS-8) Oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-30 21:04:28 UTC
From: Pirata <iz8qlk@live.it>
Message-ID: <02301ec8-67a9-44e5-bd4b-6904a82ab889@k19g2000yqc.googlegroups.com>
Source record: 2216

Station monitor used but in perfect aesthetics conditions (see in
photo), there are only some imperfections due to the time.
The electronics is perfect, and the catodic ray tube works perfectly,
the item has been used as oscilloscope up to few days ago.

The auction includes:
Original box,
manual copy (or if you don't want it, it's possible to download it
here)
Kenwood SM 220

The optional BS-8 is not included

http://cgi.ebay.it/ws/eBayISAPI.dll?ViewItem&item=110475577587

1264. Re: Bi-directional Linear amp - news of the weird

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-30 22:55:59 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <c5e353ac-fb0e-4760-8e83-25cb1b431e3a@b2g2000yqi.googlegroups.com>
Source record: 2217

On Dec 29, 1:57 pm, Kenneth Scharf <wa2...@bellsouth.net> wrote:
> Many years ago a friend of mine was repairing a Heath SB200 linear he
> had picked up. The antenna relay needed work and he was replacing the
> stupid RCA connector in the input side of the rig with an SO-239 (why
> did Heath use those RCA connectors for the antenna in all their ham
> rigs?).
>
> Anyway we were talking about how the linear improved the transmit signal
> strength, but did nothing for the receiver and he wanted to also build a
> small receiver preamp to put inside the linear cabinet, and we both got
> the samw brainstorm, at the same time. Why not wire the linear up so it
> would work in BOTH directions? I suppose a grounded grid preamp using
> tubes with a combined plate dissipation of some 300 watts seems crazy,
> and one's first though would be "you'll blow up the receiver!". But
> remember that those tubes have a power gain of only 13db and that's
> about the same as a 6BA6 rf amp tube. Of course the noise figure of the
> 572B as a preamp probably isn't quit as good as a 6CW4, but you won't
> notice it much on 20 meters. Also at the signal levels we are talking
> about the usual cutoff bias for the tubes STILL leaves them in class A
> for use as a small signal preamp!
>
> To make a long story short, we wired the relay up so it would do the
> required switching and tried it. The linear did boost received signals
> by about 13db, just as we expected. Made a difference in the DX contest!

There's something to be said for an amplifier with high IP3. One way
to get that is to use high-power devices in the amplifier. It's not
to hard to find modern solid-state devices with fairly high power
dissipation and also low noise figure. One of the obvious problems is
that such an amplifier may have the potential to blow up things
following it...

Ulrich Rohde published an article in Ham Radio magazine some thirty
years ago about a way to get a good noise figure and extremely good
IP3 in an amplifier; his example was based on CATV transistors of
modest dissipation. The article seemed to leave quite a bit to the
imagination of the reader, and I've never seen any commercial products
that come close to the performance he suggested should be possible --
not even from the company in New Jersey of which he's a director. I'd
be really happy to find such an amplifier just now... (NF ~ 2dB, TOI >
+70dBm, on the order of a watt bias power, per Rohde).

Cheers,
Tom

1265. Kenwood SM-220 Station Monitor (no BS-8) Oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-31 11:14:18 UTC
From: Pirata <iz8qlk@live.it>
Message-ID: <381ced2e-2e5b-4d89-9961-edc770742134@l30g2000yqb.googlegroups.com>
Source record: 2218

Station monitor used but in perfect aesthetics conditions (see in
photo), there are only some imperfections due to the time.
The electronics is perfect, and the catodic ray tube works perfectly,
the item has been used as oscilloscope up to few days ago.

The auction includes:
Original box,
manual copy (or if you don't want it, it's possible to download it
here)
Kenwood SM 220

The optional BS-8 is not included

http://cgi.ebay.com/Kenwood-SM-220-Station-Monitor-no-BS-8-Oscilloscope_W0QQitemZ110475765945QQcmdZViewItemQQptZAccessori_per_Radioamatori?hash=item19b8de68b9

1266. Re: Bi-directional Linear amp - news of the weird

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-31 16:05:25 UTC
From: Kenneth Scharf <wa2mze@bellsouth.net>
Message-ID: <hhii34$bn6$1@news.eternal-september.org>
Source record: 2219

K7ITM wrote:
> On Dec 29, 1:57 pm, Kenneth Scharf <wa2...@bellsouth.net> wrote:
>> Many years ago a friend of mine was repairing a Heath SB200 linear he
>> had picked up. The antenna relay needed work and he was replacing the
>> stupid RCA connector in the input side of the rig with an SO-239 (why
>> did Heath use those RCA connectors for the antenna in all their ham
>> rigs?).
>>
>> Anyway we were talking about how the linear improved the transmit signal
>> strength, but did nothing for the receiver and he wanted to also build a
>> small receiver preamp to put inside the linear cabinet, and we both got
>> the samw brainstorm, at the same time. Why not wire the linear up so it
>> would work in BOTH directions? I suppose a grounded grid preamp using
>> tubes with a combined plate dissipation of some 300 watts seems crazy,
>> and one's first though would be "you'll blow up the receiver!". But
>> remember that those tubes have a power gain of only 13db and that's
>> about the same as a 6BA6 rf amp tube. Of course the noise figure of the
>> 572B as a preamp probably isn't quit as good as a 6CW4, but you won't
>> notice it much on 20 meters. Also at the signal levels we are talking
>> about the usual cutoff bias for the tubes STILL leaves them in class A
>> for use as a small signal preamp!
>>
>> To make a long story short, we wired the relay up so it would do the
>> required switching and tried it. The linear did boost received signals
>> by about 13db, just as we expected. Made a difference in the DX contest!
>
> There's something to be said for an amplifier with high IP3. One way
> to get that is to use high-power devices in the amplifier. It's not
> to hard to find modern solid-state devices with fairly high power
> dissipation and also low noise figure. One of the obvious problems is
> that such an amplifier may have the potential to blow up things
> following it...
>
ONLY IF the amplifier is allowed to become unstable. It can't generate
any more power output than the input signal multiplied by the power
gain, so unless a KW station a few hundred feet away fires up you're safe.
> Ulrich Rohde published an article in Ham Radio magazine some thirty
> years ago about a way to get a good noise figure and extremely good
> IP3 in an amplifier; his example was based on CATV transistors of
> modest dissipation. The article seemed to leave quite a bit to the
> imagination of the reader, and I've never seen any commercial products
> that come close to the performance he suggested should be possible --
> not even from the company in New Jersey of which he's a director. I'd
> be really happy to find such an amplifier just now... (NF ~ 2dB, TOI >

> +70dBm, on the order of a watt bias power, per Rohde).
I've seen preamps using 2n3866 transistors (sometimes TWO in push-pull)
which come close to meeting this description.

>
> Cheers,
> Tom

1267. Re: Bi-directional Linear amp - news of the weird

Newsgroup: rec.radio.amateur.homebrew
Date: 2009-12-31 17:32:53 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <aeeb0602-7b9e-475d-8c68-6613015b4441@k19g2000yqc.googlegroups.com>
Source record: 2220

On Dec 31, 8:05 am, Kenneth Scharf <wa2...@bellsouth.net> wrote:
> K7ITM wrote:
...
> > One of the obvious problems is
> > that such an amplifier may have the potential to blow up things
> > following it...
>
> ONLY IF the amplifier is allowed to become unstable. It can't generate
> any more power output than the input signal multiplied by the power
> gain, so unless a KW station a few hundred feet away fires up you're safe.
...

Well...that depends on what the following stages can tolerate, the gain of the amplifier, and the signal environment you're in. I know that European AM broadcast stations in the 7MHz band can put signals into the East Coast of the US that deliver 0dBm to the output of some hams antennas, and from what I hear, listeners at many locations in Europe have to deal with even larger signals. When the phases of such signals all line up, the peak voltage can be substantial. It's at least something to beware of.

Do you happen to have any more definite references to preamps with very high TOI? I've had trouble finding anything better than about +56dBm in commercial amplifiers that don't also draw several watts (or more!) quiescent. What I'm looking for needs to be broadband, 500kHz--30MHz.

Cheers,
Tom